A Chronology of Tech History

by Tom Merritt

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Introduction

Welcome to the Chronology of Tech History.

Get ready for an excellent true story of geeky stuff being discovered, ignored, developed, misused, used right, triumphing and sometimes falling back to Earth. Literally.

You're going to see rockets that go from experiments to weapons to spaceships. You'll see broadcasting technologies go from sputtering patents to curiosities that barely work to become major media businesses. You'll see the beginnings of computers as behemoths belching punch cards right through to the to the launch of the Internet.

There's also some stuff about weather and the metric system. Because geeks like measuring things.

Not everything is in here. This is work of factual entertainment. Entertainment because it was enjoyable for me to research and write, is meant to be enjoyable to read, and is not meant to be taken as a comprehensive account of the history of technology.

It's factual however in that every entry was actually researched to find a primary source, or failing that, a trustworthy secondary source. I have a high level of confidence that what is described actually happened on these dates. See the epilogue for me details about citations.

That brings me to another point. Only things that could be pinpointed to happening on a particular day are included here. So the creation of the first mechanical computer doesn't have an entry. However, the discovery of the Antikythera Mechanism does.

I also tried to focus on things that happened besides births and deaths. I tried to only include births when the person played a significant role in other entries later in the chronology. In a couple cases the birth was

included because it allowed the telling of a story that didn't have a date associated with it. Leonardo da Vinci is a good example of that. Deaths are rare in this book. Births are so much more positive, so a death is only included if the events surrounding it were significant, think Alan Turing, or if the death dominated the world news, such as in the case of Steve Jobs.

I constructed this book by picking three, and sometimes four things, that happened on every day of the year. So some years are sparser than others. I didn't make any special effort to find things to fill out a particular year. In fact several years in the late 19th and early 20th century originally had no entries. I did seek out entries for those poor years, just to keep the flow. You can guess most of them because they only have on entry.

So if you have a favorite thing you don't see in here, there are two reasons why it didn't make it. I didn't know about it, or it wasn't as cool as the other three things on that day. But I welcome your feedback! See the epilogue for more details on how you can suggest additions and corrections.

But enough introducing. You've probably already skipped this part to get to the good stuff. For those who haven't here's a bonus. Send me an email to tommerritt@tommerrit.com with the subject line "I read the introduction" and I'll give you read access to the Google Spreadsheet that has all the unverified entries. There's hundreds of them. Lots of those are really very wrong but I haven't spent time tracking them down. Still it's a fun spreadhseet to page through if you like that sort of thing.

We start with the ancient times!

Tom Merritt

At his desk

San Rafael, California

2:32 PM September 29, 2012

ANCIENT TIMES

This chapter is short, just four entries. But they are some of the building blocks of tech. You'll get one example of astronomy, one example of big data, a Jobs-like popularization of existing underutilized tech, and a side of old timey weather blogging. Enjoy.

BC

March 30, 240 BC - Chinese astronomers observed a new broom-shaped "star" in the sky. It was the first confirmed sighting of Halley's Comet.

June 19, 240 BC - Greek astronomer, geographer, mathematician and librarian in Alexandria, Eratosthenes calculated the Earth's circumference. His data was based on the length of shadows in different locations and simple geometry, but his calculations were not far wrong.

AD

March 11, 105 - Ts'ai Lun demonstrated his process for making paper to the Han emperor in China. He probably didn't invent it, but he certainly turned it into an industry for the first time. And the industry still survives 20 centuries later even in the face of the computers that plot its doom.

February 2, 1046 - English monks recorded "no man then alive could remember so severe a winter as this was." Their analog weather blog entry recorded the beginning of the Little Ice Age.

RENAISSANCE

We're not wading in what we'd normal call technology here, but we do see some fun stuff. The start of patent law may be criticized by many software-makers, but without it I wouldn't have nearly as many dates to pin things on.

You're also going to get an early calculator, the rise of scientific societies, and the freaking Gutenberg Bible. That one's for Jeff Jarvis.

Fans of Neal Stephenson's Baroque Cycle will feel sorely cheated by this chapter. Everyone else should get a kick out of it.

1400s

April 15, 1452 - Leonardo da Vinci, one of the greatest artist, inventor and engineer in history, was born near the Tuscan town of Vinci.

August 24, 1456 – According to a handwritten note by illustrator Heinrich Cremer, the final binding of the Gutenberg Bible took place.

March 19, 1474, the Venetian Senate issued a Statute on Industrial Brevets that is widely considered the first patent law. Patents had been issued before, often at the whims of monarchs, but this statute codified the practice and set out a standard 10-year term.

1500s

August 10, 1519 - Ferdinand Magellan set sail to find that pesky trade route that Columbus was looking for, and instead circumnavigated the globe. Sort of. His ship finished the trip but Magellan didn't. At least he would get GPS devices named after him.

December 27, 1571 - In Well der Stadt, Wurttemberg of the then Holy Roman Empire, Johannes Kepler was born. His theories like the laws of planetary motion came in handy for Isaac Newton.

April 22, 1592 - Wilhelm Schickard was born. He would grow up to create an early form of calculating machine called the "calculating clock", that could add and subtract up to six-digit numbers.

1600s

August 25, 1609 - Galileo Galilei craftily beat a Dutch telescope maker to an appointment with the Doge of Venice. Galileo impressed the Doge and received a lifetime appointment and a doubled salary. Later that autumn, Galileo pointed his telescope to the Moon, and trouble began.

June 19, 1623 - Mathematician Blaise Pascal was born in France. He invented a digital calculator, the Pascaline, to help his father in his tax-collecting work.

June 8, 1637 - Rene Descartes published "Discourse on the Method for Guiding One's Reason and Searching for Truth in the Sciences", which formed the basis of the modern scientific method. It's also the source of the quote "I think, therefore I am."

January 4, 1642 - Sir Isaac Newton was born in Woolsthorpe in England and would go on to develop describe universal gravitation and the three laws of motion as well as star in Neal Stephenson's The Baroque Cycle.

November 28, 1660 - 12 men, including Christopher Wren, Robert Boyle, John Wilkins, and Sir Robert Moray met after Wren's astronomy lecture to discuss the formal constitution of a society of philosophers that would become The Royal Society. It still exists and recently opened its archives on the Web.

December 22, 1666 - Seven mathematicians and seven physicists gathered by Jean-Baptiste Colbert met in the king's library to found the French Academy of Sciences.

June 22, 1675 - Britain's King Charles II established the observatory at Greenwich with the main purpose of determining precise longitudes to aid in navigation. This purpose led to Greenwich being marked as the prime meridian and later Greenwich Mean Time.

October 29, 1675 - Gottfried Leibniz wrote the integral sign in an unpublished manuscript, a sign that would later haunt the nightmares of students and be widely misapplied on blackboards in movies.

November 11, 1675 - Gottfried Leibniz demonstrated integral calculus for the first time to find the area under the graph of good old y=f(x). That is, if you believe what he wrote in his notebooks.

EIGHTEENTH CENTURY

Now things are starting to cook. Which means these little introductory paragraphs will get shorter and eventually disappear.

There's lots of founding of the metric system here, because that's just how old the metric system is. Also keep your eyes peeled for other surprises like batteries, typewriters, and silicon valley.

1700s

April 10, 1710 – The Statute of Anne entered into force in Great Britain. The statute ended the practice of copyright being enforced by the Stationer's Guild under the licensing act and for the first time granted copyright to authors.

January 7, 1714 - Henry Mill patented a machine for transcribing letters "one after another, as in writing". Sadly, he died before he perfected the first typewriter.

December 25, 1741- In Uppsala, Sweden, Anders Celsius first used a Delisle thermometer he had marked up with 100 gradations between boiling and freezing. It was the first use of the centigrade scale of temperature.

July 7, 1752 - Joseph Marie Jacquard was born in Lyon, France. The weaver and inventor created the first programmable power loom and the cards he used to program it would be adapted by Herman Hollerith and others for programming the first computers.

January 15, 1759 - The British Museum, in Bloomsbury, London, the world's oldest public national museum, opened to the public. Entry was free and given to 'all studious and curious Persons'.

December 5, 1766 - James Christie held his first sale on Pall Mall in London. Christie's still operates auctions today and is much more civilised than EBAY.

November 29, 1777 - California's first civilian settlement Pueblo de San José de Guadalupe was founded by the Spanish. It would become the future state's first capital and eventually the heart of silicon valley.

March 13, 1781 - English astronomer William Herschel observed what he initially thought was a comet but turned out to be the planet Uranus. It was the first planet to be discovered using a telescope.

March 12, 1790 - John Frederic Daniell was born. He would grow up to invent the Daniell cell, a battery that supplied an even current during continuous operation, thus making battery power practical.

May 8, 1790 - The French National Assembly acted on a motion from Bishop Charles Maurice de Talleyrand. to create a simple, stable, decimal system of measurement units. The earliest metre unit chosen was the length of a pendulum with a half-period of a second. The system eventually evolved into the metric system.

November 17, 1790 - August Ferdinand Mobius was born in Schulpforta, Saxony. The mathematician, astronomer and physicist is most well remembered for the discovery of the Mobius strip, a 2-dimensional object with only one side when embedded in 3D space. Poor Johann Benedict Listing also discovered it at the same time but Listing strip just doesn't have the same ring.

September 22, 1791 - Michael Faraday was born in south London. He grew up to discover electromagnetic induction and coined the terms 'electrode', 'cathode' and 'ion.' He also lent his name to the Faraday cage.

December 26, 1791 - At 44 Crosby Row, Walworth Road, London, England, (we think), Betsy and Benjamin welcomed their son Charles Babbage into the world. He would grow up to make a difference.... engine.

October 28, 1793 - Eli Whitney applied to patent his improved cotton gin, capable of cleaning 50 pounds of lint per day, and powering patent metaphors and arguments for centuries to come.

June 22, 1799 - The first definitive prototype metre bars (mètre des Archives) and kilograms were constructed in platinum.

NINETEENTH CENTURY – TO 1860

This chapter will take you all the way up to the Civil War era of the United States. Plus we have enough entries to start breaking them up by decade!

Get ready for a lot of locomotion, lighting, photography and telegraphy. You know, the telegraph was the Internet of the 19th century. So all my steampunk friends tell me.

1800s

March 20, 1800 - Alessandro Volta dated a letter announcing his invention of the voltaic pile to Sir Joseph Banks, president of the Royal Society, London. We've been dealing with battery life ever since.

March 24, 1802 - Richard Trevithick and Andrew Viviane of Camborne Parish in the County of Cornwall, enrolled a patent for a steam engine that could power a full-sized road locomotive. He had previously demonstrated it by driving up a hill in a car he called the "Puffing Devil".

October 7, 1806 - Englishman Ralph Wedgwood received the first patent on carbon paper, which led to the initials cc to indicate a carbon copy which led to the email option to "cc" somebody.

1810s

August 3, 1811 - Elisha Otis was born. He invented a safety brake that prevented elevators from falling if the hoisting cable broke. Thank him every time you get in an elevator.

November 28, 1814 - For the first time, an automatic steam-powered press printed The Times in London German inventors Friedrich Koenig and Andreas Friedrich Bauer built the press. The Times quickly pointed out that they would not layoff workers, but instead increase printing, bringing the paper to a wider audience.

November 2, 1815 - George Boole was born in Lincolnshire, England AND he became a mathematician who laid down the foundations Boolean logic XOR Boolean Algebra. Search engine power users everywhere thank him.

December 10, 1815 - Ada Byron was born in London England to the poet Lord Byron and Anne Isabelle Milbanke. She would later marry William King and take on his title as Lady Lovelace. But she is best remembered as Charles Babbage's friend, and writer of the first program for his Difference Engine. She is considered by many to be the first computer programmer.

November 25, 1816 - Gaslight illuminated Philadelphia's Chestnut Street Theatre, improving on an innovation pioneered in London. Instead of coal the gas was created from pitch, reducing the malodorous vapors caused by the wonder's creation.

February 7, 1817 - The first public gas street light in the US was lit in Baltimore, Maryland at the corner of Market and Lemon streets.

1820s

June 14, 1822 – Charles Babbage announced his difference engine in a paper to the Royal Astronomical Society entitled "Note on the application of machinery to the computation of astronomical and mathematical tables".

September 17, 1822 - Jean-François Champollion, permanent secretary of the French Académie des Inscriptions, presented his Lettre a M. Dacier, describing his solution to the mystery of the Hieroglyphic inscriptions on the Rosetta Stone. A nifty bit of decryption.

May 23, 1825, William Sturgeon exhibited the electromagnet in a practical form for the first time. The exhibition accompanied the reading of a paper, recorded in the Transactions of the Society of Arts for 1825 (Vol xliii, p.38).

April 23, 1827 - Mathematics student William Rowan Hamilton presented his "Theory of Systems of Rays" at the Royal Irish Academy in Dublin. It led to the development of the wave theory of light and led to the development of quantum mechanics.

1830s

September 18, 1830 - America's first native locomotive, the "Tom Thumb" lost a race to a draft horse at Ellicotts Mills, Maryland.

August 29, 1831 – Michael Faraday discovered electromagnetic induction which is used in power generation and power transmission by generators, transformers, induction motors, electric motors, synchronous motors, and solenoids.

October 19, 1832 - Samuel Morse first conceived of the electric telegraph system. At least he said later this was the day he first thought of it.

June 5, 1833 - Ada Gordon, daughter of Lord Byron (and future Countess Lovelace) met Charles Babbage for the first time. He designed an early computer, and she published a description of his work and wrote the first computer program.

July 5, 1833 - Nicéphore Niépce died. He created the first permanent photograph in 1826 -- an image of the outside of his house.

February 25, 1837 - The US Patent Office approved Thomas Davenport's application for a patent on an "Improvement in Propelling Machinery by Magnetism and Electro-Magnetism." We'd call it an electric motor.

January 6, 1838 - Samuel Morse, with his partner, Alfred Vail, gave the first public demonstration of their new electric telegraphic system at the Speedwell Iron Works in Morristown, NJ. They used Morse's specially designed code to send the message ""A patient waiter is no loser."

February 18, 1838 - In the small town of Chirlitz of the Austrian Empire Ernst Mach was born. His work in aerodynamics and supersonic speeds, led to the unit of measurement that bears his name. He would die one day after his birthday in 1916.

January 7, 1839 - Louis Daguerre made the first announcement of his photographic system at the Académie des Sciences in Paris, though details were not presented until August of that year.

March 14, 1839, Sir John Herschel presented his 'Note on the Art of Photography, or the application of the Chemical Rays of Light to the purposes of Pictorial Representation' to the Royal Society, likely the first use of the word 'photography'.

August 19, 1839 - At a crowded meeting of the Paris Academy of Sciences, Louis Daguerre demonstrated the process of making photos called daguerreotypes.

December 18, 1839 - John William Draper took a daguerreotype of the moon, the first lunar photograph.

1840s

June 20, 1840 - Samuel F.B. Morse received a US patent for "Improvement in the mode of communicating information by signals by the application of electro-magnetism." We call it Morse code.

October 8, 1841 - Edmund C. Berkeley, an actuary at the Prudential Insurance Company, wrote a report about possible applications of electro mechanical calculation to large commercial data-processing needs.

October 16, 1843 - Sir William Rowan Hamilton finally hit on the idea of Quaternions, and needing a bit more space than his hand to jot it down, he carved it into the stone of Brougham Bridge in Dublin. Why do you care about quaternions? Because calculations involving three-dimensional rotations are essential for 3D computer graphics and computer vision. Video games people.

May 24, 1844 – Samuel Morse sent the message "What hath God wrought" from the Old Supreme Court Chamber in the United States Capitol to the Mount Clair train depot in Baltimore, Maryland. It was the first public demonstration of the telegraph.

August 28, 1845 - Scientific American began publication with the issue for this day. It would become the oldest continuously published magazine in the United States.

February 11, 1847 - Proud parents Samuel and Nancy welcomed their seventh and last child into the world. Thomas Edison would grow up to embody the word inventor.

March 3, 1847 - In Edinburgh, Scotland, an expert vocal physiology and elocution welcomed his newborn son into the world. He was named after his father. Alexander Graham Bell would go on to become synonymous with the telephone.

December 1, 1847 - The London and North Western Railway along with the Caledonian Railway adopted London Time on instructions from the General Post Office. Other railways followed suit and this was seen as the establishment of the first time zone.

September 20, 1848 – At noon in the library of the Academy of Natural Sciences in Philadelphia, members of the former Association of American Geologists and Naturalists met to create the American Association for the Advancement of Science.

1850s

February 5, 1850 - The first US patent for push-key operation of a calculating machine was issued to Dubois D. Parmelee of New Paltz, N.Y.

March 27, 1850 - San José was incorporated as one of the first cities in California and was the site of the first state capital. It would lose the capital to Vallejo in 1852 but eventually become the center of Silicon Valley and the de facto capital of the technology world.

January 6, 1851 - Leon Foucault proved the rotation of the Earth experimentally by. He wrote in his journal that he made the discovery at 2:00 am working with his famous pendulum in the cellar of his house.

November 13, 1851 - The first public message was sent on the submarine telegraph cable under the English Channel between Dover, England and Calais, France.

August 23, 1852 - The first time signals were transmitted by telegraph from the Royal Observatory in Greenwich.

July 12, 1854 - George Eastman was born to Maria Kilbourn and George Washington Eastman in Waterville, New York. He went on to found the Eastman Kodak Company and invented the roll of film.

February 19, 1856 - Professor Hamilton L. Smith of Gambier, Ohio received the first US patent for the tintype photographic picture process. It described a method for "the obtaining of positive impressions upon a japanned surface previously prepared upon an iron or other metallic or mineral sheet or plate by means of collodion and a solution of a salt of silver."

July 10, 1856 - Nikola Tesla was born in Smiljan, Lika, Croatia, which was then part of the Austro-Hungarian Empire. His father was a Serbian Orthodox Priest and his mother an inventor of household appliances.

February 22, 1857 - Heinrich Rudolf Hertz was born in Hamburg, Germany. Hertz made key discoveries in optics but also transmitted and received electromagnetic waves and gave his name to the common unit of frequency, Hz.

March 23, 1857 - The first department store elevator for passengers was installed at E.V. Haughwout & Co. in New York City. This was a significant development towards the building of skyscrapers.

May 19, 1857 - William Francis Channing of Boston, Mass. and Moses Gerrish Farmer, of Salem, Mass. received the first US patent for an "electromagnetic fire alarm telegraph for cities" (No. 17,355).

July 28, 1858 - The first use of fingerprints as identification took place in India. William James Herschel, magistrate of Nuddea, India requested local businessman Rajyadhar Konai make a handprint on the back of a contract. Herschel wanted to "frighten [Konai] out of all thought of repudiating his signature."

August 5, 1858 - The west end of the first transatlantic cable was completed when the ship Niagara anchored at the Newfoundland coast having laid 1,016 miles of telegraph cable.

August 9, 1859 - US Patent no. 25,076 was issued to Nathan Ames of Saugus, Mass. for the first escalator-type moving staircase.

September 2, 1859 - A unique combination of solar events including a magnetic explosion severely affected the young telegraph network in North America and Europe. Wires shorted out, fires started and some machines reportedly worked even when disconnected from batteries.

1860s

February 29, 1860 - Herman Hollerith was born. He would grow up to build the first punched-card tabulating machines as well as found the company that was to become IBM.

April 9, 1860 - Parisian typesetter and inventor Édouard-Léon Scott de Martinville's uses his Phonoautogram to record sound onto paper but has no way to pay it back.

October 8, 1860 - Telegraph lines opened between Los Angeles and San Francisco. This allowed gold miners to tell backers farther south that they still hadn't found any gold.

October 24, 1861 - The First Transcontinental Telegraph line across the United States was completed, ending the need for the Pony Express which had only been around for a year and a half. Pony unemployment skyrocketed.

September 21, 1866 - Herbert George Wells was born in Bromley, England. He would grow up to write under the name H. G. Wells and help form the genre of science fiction.

July 14, 1867 - Alfred Nobel demonstrated dynamite for the first time at Merstham Quarry, Surrey.

NINETEENTH CENTURY – 1870 ON

Edison sort of dominates this section. Believe me, it could have been worse. He was a patent-filing machine. In fact I'm almost certain he had a patent on a patent-filing machine.

Co-starring in this chapter is Alexander Graham Bell. You'll also get the first glimmerings of television and automobiles. Radio is still called wireless telegraphy at this point, but don't let that fool you.

1870

February 9, 1870 - US President Ulysses S. Grant signed a bill authorizing "The Secretary of War to take observations at military stations and to warn of storms on the Great Lakes and on the Atlantic and Gulf Coasts." This agency operating under the Signal Service eventually became the National Weather Service.

August 2, 1870 - The world's first underground tube railway, (the Met had been the first underground non-tube railway) Tower Subway, opened in London, running from Lower Thames street to Vine Street. It closed after 4 months of operation.

November 1, 1870 - The United States Weather Bureau, now known as the National Weather Service, made its first weather report. 24 observers sent reports by telegram to Washington DC.

November 8, 1870 - The US Weather Bureau (someday to become the National Weather Service) issued its first weather warning for a storm on the Great Lakes. It was accurate, but there was no high-pitched beep yet.

1871

January 17, 1871 - Andrew S. Hallidie received a patent for an "endless wire rope way" which he would put into practice as the cable car system in San Francisco, California.

1872

November 19, 1872 - E.D. Barbour of Boston, Mass. received the first US patent for an adding machine capable of printing totals and subtotals. The so-called "calculating machine," proved impractical.

1873

August 1, 1873 - Andrew Smith Hallidie took his San Francisco cable car for its first test run. The tracks ran from Clay and Kearny Streets for 2800 feet to a hill 307 feet above.

December 30, 1873 - A number of gentlemen in New York City founded the American Metrological Society, feeling that a change to the Metric System was needed by civilized nations. 100 years later their defunct and gallons, miles, and Fahrenheit rule the US.

1874

July 24, 1874 - Woodward and Evans Light filed a patent for Artificial light by means of Electricity with the Canadian Department of Agriculture. Woodward later sold the patent to Thomas Edison, who patented a different and more successful version of the incandescent lamp in the US.

1875

May 20, 1875 - 17 nations (including the US) signed the 'Convention du Mètre' in Paris, France, establishing the International Bureau of Weights and Measures.

1876

March 7, 1876 - Alexander Graham Bell received a US patent for an "Improvement in Telegraphy" (No.174,465) which established the principle of bidirectional signals that made the telephone possible.

March 10, 1876 - Alexander Graham Bell spoke the immortal words "Mr. Watson, come here. I want you." over the a telephone in his Boston laboratory, summoning his assistant from the next room. It is widely considered the first instance of someone using technology when they bloody well could have just got up and spoke to someone in person. It is also widely considered the first phone call.

August 8, 1876 - Thomas Edison received a US patent for a mimeograph, which combined with an invention by A. B. Dick led to the first widely successful mimeograph machine.

October 9, 1876 - The first two-way telephone conversation occurred over outdoor wires between Alexander Graham Bell and his assistant, Watson. They used a two-mile telegraph line linking Boston and East Cambridge.

1877

February 12, 1877 - Alexander Graham Bell demonstrated the telephone for the first time in public at the Salem Lyceum Hall. The demonstration ended with the sending of the first telephone news dispatch which was received by the Boston Globe.

August 12, 1877 - Thomas Edison sketched his idea for the phonograph, and may have even completed a model. The first working model wasn't completed until December 6.

August 15, 1877 - In a letter to T.B.A. David, president of the Central District and Printing Telegraph Company in Pittsburgh, Thomas Edison suggested using the word 'hello' to indicate a telephone connection was active. Alexander Graham Bell had reportedly preferred 'Ahoy' as the greeting.

November 21, 1877 - Thomas Edison announced his invention of the phonograph, a machine that could record and play sound.

December 6, 1877 - Thomas Edison tested out his new invention, the phonograph, be recording the first lines of the poem "Mary Had a Little Lamb" He recreated the event in 1927.

1878

January 14, 1878 - Alexander Graham Bell demonstrated the telephone to Queen Victoria at her Osborne House estate on the Isle of Wight. He reached out and touched her, a faux pas which made him the first commoner in years to lay hands on the royal person.

January 28, 1878 - The first commercial telephone exchange in the US was installed at New Haven, Connecticut, and served 21 subscribers connected by a single strand of iron wire. Only two conversations could be handled simultaneously and six connections had to be made for each call.

February 19, 1878 - Thomas Edison received a US patent (No. 200521) for the phonograph. His first recording was of "Mary Had a Little Lamb" spoken into a large horn which transmitted vibrations to a needle that cut the recording on a hand-rotated cylinder.

June 15, 1878 - Photographer Eadweard Muybridge used high-speed photography to capture a horse's motion. The photos showed the horse with all four feet in the air during some parts of its stride. Stop-motion photography was born.

October 15, 1878 - The Edison Electric Light Company began operation. They would go on to become more general. As in making up a significant part of General Electric.

December 18, 1878 - Joseph Swan demonstrated the electric lamp to the Newcastle Chemical Society in northern England. His bulb would burn for about 40 hours. Edison's later bulb would burn for closer to 150 hours.

1879

February 3, 1879 - The first practically usable incandescent filament electric light bulb was demonstrated to 700 people by Joseph Wilson Swan at the Literary and Philosophical Society of Newcastle upon Tyne.

March 14, 1879 - Albert Einstein was born in Ulm in Württemberg, Germany. He would grow up to work in the Swiss patent office. And reinvent physics.

October 21, 1879 - Thomas Edison finished up 14 months of testing with an incandescent electric light bulb that lasted 13½ hours. It improved on 50-year-old technology to make light bulbs safe and economical by using lower electricity, a carbon filament and an improved vacuum.

November 4, 1879 - James Jacob Ritty patents the first cash register as "Ritty's Incorruptible Cashier". He was motivated to invent it by the no good thieving employees at his saloon.

1880

February 16, 1880 - 30 engineers from eight states met in the New York editorial offices of the American Machinist to found the American Society of Mechanical Engineers.

August 2, 1880 - Parliament officially adopted Greenwich Mean Time (GMT) as the official time of Great Britain.

December 17, 1880 - The Edison Electric Illuminating Company of New York was incorporated to install a central generating station in New York City. New Yorkers know it now as ConEd.

December 20, 1880 - New York's Broadway from 14th to 26th street was first lighted by electricity and became known as the "Great White Way."

1881

January 25, 1881 - Thomas Edison and Alexander Graham Bell from the Oriental Telephone Company in agreement with the Anglo-Indian Telephone COmpany Ltd.. The company was licensed to sell telephones in Greece, Turkey, South Africa, India, Japan, China and several other Asian countries.

1882

January 17, 1882 - Thomas Edison received a patent for adding a carbon microphone to the telephone. The patent described finely divided conducting material, like carbon, between metal cups mounted on arms that attached to the mouthpiece diaphragm.

March 13, 1882 - At the Royal Institution, Eadweard J. Muybridge demonstrated his zoopraxiscope, an optical apparatus that exhibited photographs of moving animals. It is sometimes considered the first movie projector.

April 29, 1882 - Ernst Werner von Siemens presented his "trackless trolley" called the Elektromote in a Berlin suburb. The system pulled electricity from overhead wires, but used road wheels instead of tracks.

September 30, 1882 – Thomas Edison's first commercial hydroelectric power plant began operation on the Fox River in Appleton, Wisconsin, United States.

December 22, 1882 - Edward H. Johnson of the Edison Illumination Company strung a single power cord with red white and blue lights on his Christmas tree becoming the first person to use Christmas tree lights.

1883

January 19, 1883 -The first electric lighting system using overhead wires went into service in Roselle, New Jersey.

June 2, 1883 - Thomas Edison and Stephen D. Field built built the world's first elevated electric railway. It was a narrow-gauge 3-foot-wide track in the gallery around the edge of the main exhibition building of the Chicago Railway Exhibition. It ran nine miles per hour.

November 18, 1883 - US and Canadian railways adopt five standardized time zones to replace the multitude of local times scattered across North America. It was called "The Day of Two Noons" as each railroad station clock was reset as standard-time noon was reached within each time zone.

1884

March 27, 1884 - Bell and Watson experimented with a line of two twelve gauge hard-drawn copper wires connecting Boston and New York City. The line worked for about ninety minutes before finally failing.

April 26, 1884 - The New York Times reported that "sending mails by electricity" was to be investigated by the Post Office Committee of the US House, by providing for contracts with an existing telegraph company. It could lead to 10 cent telegrams!

May 1, 1884 - Construction began in Chicago on the Home Insurance Building, generally acknowledged as the first steel-frame high-rise skyscraper.

May 13, 1884 - A group of people interested in the new field of electricity met in New York to start the American Institute of Electrical Engineers.

October 13, 1884 - Geographers and astronomers adopted Greenwich as the Prime Meridian, making it the International standard for zero degrees longitude. Today the Greenwich observatory shoots a laser northwards at night to indicate the meridian. It is not a dangerous laser.

October 14, 1884 - US inventor George Eastman received a patent on his new paper-strip photographic film. It would reign for over 100 years until digital stole its thunder.

1885

March 3, 1885 - The American Telephone and Telegraph Company was incorporated in New York State as a subsidiary of American Bell Telephone.

August 30, 1885 - Gottlieb Daimler received a patent for adding an internal combustion engine to a bicycle to make the first gasoline-driven motorcycle.

December 22, 1885 - A patent for a gravity switchback railway was issued to La Marcus Thompson of Coney Island, NY. You and I might call it a "roller coaster"

1886

January 29, 1886 - Karl Benz submitted a patent for his Benz Patent Motorwagen, a three-wheeler vehicle with a one-cylinder four-stroke gasoline engine. The world's first patent for a practical internal combustion engine powered automobile. Previous automobiles had been steam-powered.

March 6, 1886 - The first alternating current power plant in the US was put into regular operation in Great Barrington, Massachusetts.

March 20, 1886 - The first alternating current power plant in the United States began providing power to Main Street in Great Barrington, Mass.

July 3, 1886 - Karl Benz drove his Patent Motor Wagen on Mannheim's Ringstraße, reaching a top speed of 16 km/h (10 mph) powered by a 0.75-hp one-cylinder four-stroke gasoline engine. It was the first public drive of what is considered the first purpose-built automobile.

December 28, 1886 - Josephine Garis Cochrane of Shelbyville, Illinois received the first US patent for a commercially successful dishwasher. Dishes fit in compartments in a wheel that turned inside a copper boiler. Her company eventually became KitchenAid.

1887

May 2, 1887 - 65-year-old Rev. Hannibal Goodwin takes his nitrocellulose flexible film out of his attic laboratory and into the patent rolls. He beat the Eastman Kodak company by two years, but his vaguely-worded patent led to a 27-year legal battle.

November 8, 1887 - German immigrant Emile Berliner patented a successful system of sound recording that used flat disks instead of cylinders. The first versions were made of glass. Talk about your broken records.

1888

May 16, 1888 - Emile Berliner demonstrated his flat disc recording and reproduction in a lecture he gave to the Franklin Institute in Philadelphia, which was printed in the institute's Journal (vol. 125, no. 60).

August 13, 1888 - John Logie Baird was born in Helensburgh, Scotland. He would grow up to invent the first working television system in the world.

August 14, 1888 – Mr. George Gouraud introduced the Edison phonograph to London in a press conference, including the playing of a piano and cornet recording of Sullivan's "The Lost Chord," one of the first recordings of music ever made.

August 21, 1888 - William Seward Burroughs received four patents, including one for a 'Calculating Machine'. It would lead to the creation of the Burroughs Adding Machine Company.

September 4, 1888 - George Eastman was issued US patent No. 388,850 for his roll-film box camera.

October 17, 1888 - Thomas Edison filed a patent for something called an optical phonograph. Despite the conflicting name, it was a film camera with images 1/32nd of an inch wide. He said it would "do for the eye what the phonograph does for the ear."

1889

January 8, 1889 - Herman Hollerith received a patent for his electronic tabulating machine. His Tabulating Machine Company would go on to merge with three others and be called International Business Machines known today as IBM.

March 12, 1889 - Almon B. Strowger of Kansas City filed his patent for the first automatic telephone exchange.

June 3, 1889 - The first long-distance transmission of electricity took place, sending power from a hydroelectric generator at Willamette Falls 14 miles west to 55 street lights at 4th and Main in Portland, Oregon.

July 30, 1889 - Vladimir Zworykin was born in Russia. He would go on to earn the title "Father of Television" (one of several called that) for his work on the iconoscope and the kinescope. He worked on television for RCA.

September 23, 1889 - Fusajiro Yamauchi founded Nintendo Koppai in Kyoto, Japan, to manufacture hanafuda, Japanese playing cards. Mario came much later.

November 23, 1889 - The   installed its "nickel-in-the-slot player" at the Palais Royale Saloon in San Francisco. The first jukebox. Up to four people could put in a coin, put on earphones and listen to a record playing on an Edison Class M phonograph.

1890

February 4, 1890 - Thomas Edison received a patent for the first quadruplex telegraph, which could send two messages simultaneously in each direction. One message consisted of an electric signal of varying strength, while the second was a signal of varying polarity.

June 1, 1890 - The US Census Bureau began using Herman Hollerith's tabulating machine for the first time. This gave Hollerith the basis to later found his Tabulating Machine Company, which was one of four companies that merged to form IBM.

1891

February 27, 1891 - David Sarnoff was born near Minsk.. He would go on to befriend Marconi, rise to the Presidency of RCA, and be integral in founding NBC.

March 10, 1891 - Almon B. Strowger was issued a US patent for his electromechanical switch to automate a telephone exchange. Strowger wasn't the first to think of of automatic switching but he was the first to make a practical switch.

May 20, 1891 - The first public demonstration of a prototype Kinetoscope was given at Edison's laboratory for approximately 150 members of the National Federation of Women's Clubs. The New York Sun reported on the demonstration.

1892

April 15, 1892 – The Edison General Electric Company and the Thomson-Houston Company merge to form the General Electric Company, manufacturer of dynamos and electric lights.

1893

February 23, 1893 - Germany's Imperial Patent Office granted Rudolph Diesel Patent No. 67207 for "a new efficient thermal engine". We just call it, the Diesel engine.

May 9, 1893 - Thomas Alva Edison demonstrated the Kinetoscope for the first time at the Brooklyn Institute of Arts and Sciences.

October 6, 1893 - US copyright was issued to William K. L. Dickson for a "publication" consisting of "Edison Kinetoscopic Records." It was the first motion picture copyright in North America. No torrents were uploaded until much later.

1894

April 14, 1894 - Alfred Tate, a former Edison associate and the Holland Brothers, opened a public Kinetoscope in New York City at 1155 Broadway, on the corner of 27th Street—the first commercial motion picture house.

August 14, 1894 - The first wireless transmission of information using Morse code was demonstrated by Oliver Lodge during a meeting of the British Association at Oxford. A message was transmitted about 50 meters from the old Clarendon Laboratory to the lecture theater of the University Museum.

November 26, 1894 - Norbert Wiener was born in Columbia, Missouri. He would get his BA in mathematics at age 14 but is most remembered for his theory of regulation and of signal transmission which he called "cybernetics"

1895

January 29, 1895 - Charles Proteus Steinmetz received a patent for a "system of distribution by alternating currents." His engineering work made a widespread power grid practical.

February 13, 1895 - French patent No. 245,032 was filed for appareil servant à l'obtention et à la vision des épreuves chrono-photographiques, AKA the Cinématographe, a combined motion-picture camera and projector.

March 22, 1895 - The Lumiere brothers showed their first film to an audience. It was a romantic comedy about a crowd of mostly women leaving a building.

May 7, 1895 - The first demonstration of A A Popov's electromagnetic wave receiver took place at a meeting of the Russian Physical Chemical Society in St.- Petersburg. It was essential to the development of wireless communications.

May 7, 1895 - Otto Steiger received a patent for the Millionaire calculating machine. Switzerland's Hans Egli made 4,700 of the 120-pound things. The Millionaire's chief feature was the ability to do direct multiplication with a single rotation of the handle.

November 5, 1895 - The US Patent office granted George B. Selden the US patent for his road engine, often considered the first car. He made good money licensing the patent, until Henry Ford crushed him in court. Hence the reason none of us drive Seldens.

November 8, 1895 - German physicist Wilhelm Roentgen, working in his lab in Wurzburg noticed a strange effect while studying vacuum tubes covered in black cardboard. He eventually saw his own skeleton and went on to publish a paper "ON a new kind of rays" that would end up being called X-Rays.

December 28, 1895 - The first commercial presentation of the famous Lumière Cinématographe took place at the Salon Indien of the Grand Café in Paris. Invited payees got ten film.

1896

January 23, 1896 - Wilhelm Roentgen spoke to the Würzburg Physical Medical Society where he demonstrated X-rays by photographing the hand of session chair Dr. Albert von Kolliker, a famous anatomist.

February 26, 1896 - Hoping to test the suns ability to create X-rays. Henri Becquerel placed a wrapped photographic plate in a closed desk drawer, with a phosphorescent uranium rocks laid on top. He left it in the drawer for several days until the sun came out.

March 1, 1896 - Henri Becquerel discovered images of uranium rocks had appeared on a photographic plate without exposure to the sun. He had discovered natural radiation.

March 24, 1896 – A. S. Popov supposedly made the first radio transmission in human history. Popov is said to have transmitted the words "Heinrich Hertz" from one building to another on the campus of St. Petersburg University, though the assertion was not published until years later because of the need for military secrecy.

May 6, 1896 - Samuel Pierpoint Langley's Aerodrome No. 5 made the first successful flight of an unpiloted, engine-driven, heavier-than-air craft of substantial size.

June 2, 1896 – Guglielmo Marconi applied for British Patent number 12039 regarding a system of telegraphy using Hertzian waves. We'd call it radio.

December 12, 1896 - Guglielmo Marconi amazed a group at Toynbee Hall in East London with a demonstration of wireless communication across a room. Every time Marconi hit a key a bell would ring from a box across the room being carried by William Henry Preece.

1897

February 15, 1897 - Ferdinand Braun published a paper in the journal Annalen der Physik und Chemie describing his "Braun tube", the first cathode-ray oscilloscope, which paved the way for the modern CRT.

June 12, 1897 - Karl Elsener legally registered his "soldiers' knife" for use by the Swiss army. The original had a wooden handle, a blade, a screwdriver and a can opener.

July 2, 1897 – 23-year-old Guglielmo Marconi received a patent in England for his wireless telegraphy which we now call radio. The Wireless Telegraph and Signal Co. Ltd. was formed a few weeks later.

August 31, 1897 – Thomas Edison received a patent for the kinetographic camera, the forerunner of the motion picture film projector.

1898

July 30, 1898 - The Winton Motor Carriage Company placed a magazine advertisement in Scientific American calling on readers to "dispense with a horse." It's the earliest known automobile ad.

December 21, 1898 - Building on Henri Becquerel's discovery of spontaneous radioactivity two years earlier the husband-and-wife team of Pierre and Marie Curie discovered Radium. Marie particularly figured out how to separate it from its radioactive residues.

1899

January 10, 1899 - A US patent was issued for an "Electric Device," invented by David Misell, which used D size batteries laid end to end in a paper tube with a light bulb and a brass reflector at the end. The batteries only lasted long enough for a "flash" of light, hence the name Flashlight.

March 27, 1899 - Guglielmo Marconi made the first wireless transmission from France to England. A message was sent 32 miles from Wimereaux near Boulogne, France, to the South Foreland lighthouse near Dover, England. This became an important alternative to laying undersea cables for telegraphy.

July 17, 1899 – Nippon Electric Company Ltd. (NEC) was founded by Iwadare Kunihiko, an expert in telegraphic systems who worked under Thomas Edison. Western Electric provided funding, making it the first Japanese joint-venture with a foreign company.

TWENTIETH CENTURY

You gotta love a decade that begins with a Haitian getting a patent for an airship and ends with color motion pictures that would take 50 years to become common. There are also some really good births in this decade.

1900

February 20, 1900 - John F. Pickering of Haiti received a US patent for his design of an air ship.

December 14, 1900 - German physicist Max Planck published his theory that radiant energy is made up of particle-like components, known as "quantum." And quantum physics was born.

1901

January 9, 1901 - The first application for a patent for Meccano was submitted. Known at first as "Mechanics Made Easy," this invention of Frank Hornby became a worldwide success and is sold in the US under the name "Erector Set."

January 29, 1901 - In Brooklyn, Allen B. DuMont was born. He would go on to perfect the cathode ray tube, sell the first practical commercial television and found the first national US TV network to fail. It was eventually sold to Fox Television Stations.

December 5, 1901 - At 2156 Tripp Avenue in Chicago, Elias and Flora welcomed their new baby boy into the world. They had no idea at the time that Mickey Mouse had also come into the world along with their son, Walt Disney.

December 5, 1901 - Physicist Werner Heisenberg was born. We may not know both his precise position and precise momentum at the same time, but we are certain he was born in Wurzburg, Germany.

1902

January 18, 1902 - Nikola Tesla filed a patent application for wireless energy transmission. The patent was granted 12 years later. We're still waiting for the kinks to get worked out.

May 17, 1902 - A strange device was discovered near Antikythera off the coast of Greece. The device is later found to be a sophisticated calculating mechanism dating from 150 BC.

June 9, 1902 - Joe Horn and Frank Hardart opened the first US Automat at 818 Chestnut St. in Philadelphia. The waiterless restaurant charged a nickel for most dishes.

August 2, 1902 - Mina Spiegel Rees was born in Ohio. and became one of the earliest female computer pioneers. She ran the Office of Naval Research, where she organized work on early computers like the Harvard Mark I.

September 1, 1902 -Georges Méliès' Le voyage dans la lune (A Trip to the Moon) debuted in France. It is often considered the first real science fiction film.

1903

January 18, 1903 - The first two-way transatlantic communication, and first wireless telegram was sent between North America and Europe. US President Teddy Roosevelt and King Edward VII. They wrote to each other how awesome the wireless telegraph was.

June 4, 1903 - In one of the earliest examples of white hat hacking, Nevil Maskelyne interrupted a demonstration of the Marconi radio

communications system at the Royal Institution, London. Before Marconi's message from Poldhu, Cornwall could arrive, Maskelyne hijacked the signal sending the word "rast" repeatedly and then the phrases, "There was a young fellow of Italy, who diddled the public quite prettily."

July 23, 1903 - Ford sells its first car to Dr. Ernst Pfenning of Chicago. The two-cylinder Model A was assembled at Mack Avenue Plant in Detroit.

December 17, 1903 - Orville Wright successfully made a flight in a heavier-than-air machine that took off from level ground under its own power and was controlled during flight. It's generally considered the first airplane flight.

1904

October 27, 1904 - The first underground New York City subway line opened. The line ran from City Hall in lower Manhattan through Grand Central, Times Square and ended north in Harlem. Rides cost five cents.

November 16, 1904 - Sir John Ambrose Fleming went "scudding down Gower Street" in London on his way to patenting the "oscillation valve" which we fondly call the Vacuum Tube. His patent was later invalidated by the US supreme court, but that didn't stop Fleming from being Knighted and receiving a medal of honor from the Institute of Radio Engineers.

1905

March 28, 1905 - Cornelius Ehret of Rosemont, Pennsylvania received a patent for the "Art of Transmitting Intelligence." It was the forerunner of the modern fax.

May 15, 1905 – 110 acres of land in southern Nevada are auctioned off, founding a new city. They would become downtown Las Vegas which would grow to become the host for major tech events like Comdex, CES and more.

November 21, 1905 – The Annalen Der Physik published Albert Einstein's paper, entitled "Does the Inertia of a Body Depend Upon Its Energy Content?" The paper revealed the relationship between energy and mass. You know the relationship as $E = mc^2$.

1906

August 19, 1906 - Philo Farnsworth was born on INdian Creek in Beaver County, Utah. He would grow up to inspire the beloved professor character on Futurama. He also gets credit for Inventing the first completely electronic television.

October 23, 1906 - Alberto Santos-Dumont flew an airplane in the first heavier-than-air flight in Europe at Champs de Bagatelle, Paris, France. Some argue he should be credited with the first flight at all. But that's a long controversy.

December 9, 1906 - Grace Hopper was born. She would rise to the rank of Rear Admiral but be best remembered for popularizing the term "debugging" for hunting down computer errors. She conceptualized the idea of machine-independent programming languages, which led to the development of COBOL.

1907

October 17, 1907 Guglielmo Marconi's company began the first wireless commercial radio service, and Canada got some tech first. Glace Bay Nova Scotia was able to transmit to Clifden, Ireland. The service was used for trans-atlantic telegraph service.

1908

January 12, 1908 - Lee de Forest, a French engineer and scientist, broadcast a phonograph record show from the Eiffel Tower for an audience of less than 50 people. The show was also heard over 500 miles from the tower, becoming the first long-distance radio message transmission.

February 18, 1908 - Dr Lee de Forest received a patent for "Space Telegraphy" which described a three-element vacuum tube later called the triode which could amplify feeble electric currents, and proved especially useful for radio reception.

March 2, 1908 - Gabriel Lippman proposed using a series of lenses at a picture's surface instead of opaque barrier lines, allowing three dimensional pictures. He titled his presentation to the French Academy of Sciences "La Photographie Integral".

May 23, 1908 - John Bardeen was born. He grew up to become to win the Nobel Prize twice, once for inventing the transistor, and once for figuring out superconductivity.

June 18, 1908 - Scottish electrical engineer, Alan Archibald Campbell-Swinton, published a brief letter in the journal Nature, describing the essentials of making and receiving television images. He described using an electron gun in the neck of a cathode-ray tube to shoot electrons toward the flat end of the tube, which was coated with light-emitting phosphor. Others like Farnsworth and Baird would make just such devices years later.

July 8, 1908 - Charles Urban demonstrated Kinemacolor, the first successful color motion-picture process, at a scientific meeting in Paris attended by Auguste and Louis Lumière.

August 8, 1908 - For the first time in public, Wilbur Wright showed off the Wright Brothers' flying machine at the racecourse in Le Mans, France. French doubts about the Wright Brothers' claims to flight were put to rest for the time being.

1909

February 26, 1909 – The first successful color motion picture process, Kinemacolor, was shown to the general public at the Palace Theatre in London.

THE TEENS

Here come big advances in electric lighting and telephony that lay the infrastructure that tech will need. From here on out the years speak for themselves. We'll still divide the chapters up though so it's easier to flip through. Enjoy!

1910

January 13, 1910 - The first public radio broadcast took place with a live performance of the opera Cavalleria rusticana sung by Enrico Caruso and others was broadcast from the Metropolitan Opera House in New York City. The transmitter had 500 watts of power.

July 31, 1910 - Dr. Hawley Crippen was arrested when the boat he was on docked in Quebec. He was the first person to be caught as a result of a wireless telegraph.

November 29, 1910 - The first US patent for a traffic signal system was issued to Ernest E. Sirrine. It switched an illuminated sign between the words "stop" and "proceed"

December 11, 1910 - Georges Claude, the first person to apply an electrical discharge to a sealed tube of neon gas, displayed the first neon lamp to the public at the Paris Motor Show.

1911

April 5, 1911 - Cuthbert Hurd was born in Estherville, Iowa. He would grow up to work at IBM where he quietly persuaded the company that a market for scientific computers existed. He sold 10 of the very first IBM 701s and managed the team that invented FORTRAN.

June 16, 1911 – The Tabulating Company (founded by Herman Hollerith), the Computing Scale Company, and the International Time Recording Company merged to form the Computing-Tabulating-Recording Company in Endicott, New York. They would later change the company name to International Business Machines,and later just IBM.

1912

June 23, 1912 - Alan Turing was born in London, although his father worked for the Indian Civil Service and his parents lived in India. He helped break the code of the German enigma machine and developed the Turing test for artificial intelligence.

August 13, 1912 - The US Department of Commerce issued its first experimental radio license in compliance with the International Radio Convention and Radio Act of 1912. St. Joseph's College received a license with serial number 1 to operate 2 kilowatts station 3XJ.

1913

December 1, 1913 - Henry Ford added the moving-chassis assembly line to produce Model T's in his Highland Park, Michigan factory. It was the crowning glory in his attempts to increase efficiency and production.

December 30, 1913 - Dr William David Coolidge patent for improvements in tungsten and methods for making the same for use as filaments in incandescent lights. It made light bulbs last a lot longer. Too bad that in 1928, G.E. got a court to declare the patent was not an invention.

1914

August 5, 1914 - The American Traffic Signal Co. installed their first electric traffic light at East 105th street and Euclid Avenue in Cleveland, Ohio.

October 6, 1914 - Edwin H. Armstrong received a US patent for a "Wireless Receiving System" which described his famous regenerative, or feedback, circuit. Armstrong would go on to pioneer FM radio.

1915

January 25, 1915 - AT&T inaugurated transcontinental telephone service with a call made between New York City and San Francisco, Cal. The line had been completed the previous summer too early for the Panama Pacific Exposition.

February 7, 1915 - The first completely successful tests of the wireless telephone from a moving train were conducted on Feb 7 on the Delaware, Lackawanna and Western Railroad when spoken messages were clearly heard twenty six miles from Lounsberry to Binghamton, NY.

1916

March 20, 1916 – The Annalen der Physik received a paper titled 'Die Grundlage der allgemeinen Relativitätstheorie' by Albert Einstein. "The Foundation of the General Theory of Relativity" changed physics and technology dramatically.

April 30, 1916 - Claude Elwood Shannon was born. He is considered the father of information theory and is the man who coined the term 'bit' for the fundamental unit of both data and computation.

1917

April 6, 1917 - Following a declaration of war against Germany, President Woodrow Wilson issued an executive order closing all radio communication not required by the US Navy.

1918

July 14, 1918 - Computer pioneer and MIT professor Jay Forrester was born on a cattle ranch in Climax, Nebraska. With Robert Everett, Forrester led one of the most important early computer projects, the Whirlwind, and developed and founded the field of system dynamics.

1919

April 9, 1919 - Presper Eckert was born in Philadelphia. Eckert became famous for his work, with John Mauchly on the ENIAC project.

July 13, 1919 - The British airship R34 finished the first airship roundtrip journey across the Atlantic from Scotland to Mineola, Long Island and back to Norfolk, England after 182 hours of flight.

THE TWENTIES

1920

July 6, 1920 - A US Navy F5L seaplane took off from Hampton Roads, Virginia, using a radio compass for the first time. The pilots located and flew to the Battleship Ohio about 94 miles offshore.

August 20, 1920 - The first commercial radio station, 8MK, began operating in Michigan. Now, WWJ, it is owned by CBS.

September 29, 1920 - The Joseph Horne department store in Pittsburgh ran an advertisement in the Pittsburgh Sun, describing wireless Victrola music being picked up by radio. Amateur Wireless Sets were on sale for $10.

November 2, 1920 - KDKA in Pittsburgh started broadcasting as the first commercial radio station in the US. The first broadcast? Election results. Actual results, not projections.

1921

January 25, 1921 - A play called Rossum's Universal Robots (R.U.R.) by Karel Capek debuts at the National Theater in Prague. It's the first appearance of the word robot. Spoiler alert, the robots end up killing all the humans but one.

August 4, 1921 - The first facsimile was transmitted by radio across the Atlantic Ocean using the Belinograph invented by Edouard Belin. A message written by C. V. Van Anda, managing editor of The New York Times and addressed to the Matin in Paris, was sent in seven minutes.

August 5, 1921 - The first radio broadcast of a baseball game happened on KDKA from Pittsburgh's Forbes Field. Harold W. Arlin announced the game between the Pittsburgh Pirates and the Philadelphia Phillies.

October 8, 1921 - KDKA radio in Pittsburgh conducted the first live broadcast of a football game from Forbes Field. The University of Pittsburgh beat West Virginia University.

1922

September 27, 1922 - Scientists at the Naval Aircraft Radio Laboratory near Washington, D.C., demonstrated radar by showing that if a ship passed through a radio wave broadcast between two stations, that ship could be detected.

October 18, 1922 - Six telecom companies joined to found the British Broadcasting Company in order to provide radio broadcasts in Britain. The private company was later replaced by the non-commercial British Broadcasting Corporation in 1927.

November 14, 1922 - The BBC sent its first transmission from station 2LO at Marconi House London. The first newscast was read by Arthur Burrows, first Director of Programmes.

November 26, 1922 - Toll of the Sea debuted. It was the first color movie that didn't require a special projector, the second technicolor film ever, and the first in wide release.

1923

March 12, 1923 - Inventor Lee De Forest demonstrated The Phonofilm for the press. It was the first motion picture with a sound-on-film track.

May 18, 1923 - The first patent application for the rotary-dial telephone was submitted in France by Antoine Barnay.

October 16, 1923 - Distributor M. J. Winkler, contracted to distribute the "Alice Comedies"marking the founding of the Disney Brothers Cartoon Studio which eventually changed its name to the Walt Disney Company, at Roy's suggestion. So don't expect anything after this date to ever go out of copyright.

December 31, 1923 - The chimes of Big Ben were broadcast on radio for the first time by the BBC, beginning a new year's tradition.

1924

February 14, 1924 – The Computing-Tabulating-Recording Company merged with its subsidiary and took the subsidiary's name, International Business Machines Corporation AKA IBM.

December 30, 1924 - Astronomer Edwin Hubble announced that he had found stars in the spiral nebula Andromeda, and using Leavitt's formula measured them as 860,000 light years away proving Andromeda was a separate galaxy. He would go on to find a dozen more galaxies.

1925

January 30, 1925 - Doug Engelbart was born in Portland, Oregon. He is most famous for his work on the first computer Mouse, but also worked on many other innovations involving graphical user interfaces, hypertext and networks.

March 25, 1925 - John Logie Baird gave his first public demonstration of his 'Silhouette Television' at the Selfridges department store, Oxford Street, London. It was part of the stores birthday celebration.

April 18, 1925 - The first commercial radio facsimile transmission was sent from San Francisco, California to New York City. It was a photograph showing Louis B. Mayer presenting Marion Davies with a gift.

June 13, 1925 - Charles Jenkins publicly demonstrated synchronized transmission of silhouette pictures and sound, becoming the first person to demonstrate TV in the US.

October 2, 1925, John Logie Baird performed the first test of a working television system. It delivered a grayscale 30-line vertically scanned image, at five frames per second. After a ventriloquist's dummy appeared on screen, 20-year-old William Edward Taynton became first person televised in full tonal range.

1926

March 7, 1926 - The first successful Transatlantic telephone call was placed between New York City and London. Transatlantic service began the following year at $75 a minute.

March 16, 1926 - Robert Goddard conducted his first successful launch of a liquid-fueled rocket in Auburn, Massachusetts.

April 20, 1926 – Sam Warner approves the sound-on-disc system created by Western Electric and creates the Vitaphone company to develop the process to add sound to film.

November 15, 1926 - The National Broadcasting Company radio network opened with 24 stations. It was a joint creation of RCA, General Electric and Westinghouse. AT&T provided the spark for the network by selling WEAF to RCA.

1927

February 23, 1927 – President Calvin Coolidge signed Public Law no. 632 establishing the Federal Radio Commission which was later replaced by the Federal Communications Commission.

February 23, 1927 – German physicist Werner Heisenberg wrote a letter to Wolfgang Pauli, describing the uncertainty principle for the first time. He submitted a paper on the principle for publication the following March.

April 7, 1927 - The Bell System sent live TV images of Herbert Hoover, then the Secretary of Commerce, over telephone lines from Washington, D.C. to an auditorium in Manhattan. It was the first public demonstration in the US of long-distance television transmission.

August 9, 1927 - Computer pioneer Marvin Minsky was born in New York City. Minsky grew up to become a pioneer in Artificial Intelligence research and wrote the book "The Society of Mind."

September 7, 1927 – The first fully electronic television system is demonstrated by Philo Taylor Farnsworth in San Francisco.

September 18, 1927 - The Columbia Phonograph Broadcasting System went on the air with 47 radio stations. Within two years it would be sold and become the Columbia Broadcasting System and later simply CBS.

October 6, 1927 - Al Jolson appeared on a movie screen in New York City and said for all to hear "Wait a minute, wait a minute, you ain't heard nothin' yet." It was the first talkie.

1928

January 13, 1928 - Three television sets were installed by GE in homes in Schenectady, New York in order to demonstrate the first home television receiver. The picture was 1.5 inches long by 1 inch wide and 24 lines at 16 frames per second.

January 17, 1928 - Anatol M. Josepho received a the first US patent for a fully automatic photographic film developing machine. The Photomaton better known as a PhotoBooth in the US still survives as an app and in dark corners of subway stations.

February 25, 1928 – Charles Jenkins Laboratories of Washington, D.C. became the first holder of a television license from the US Federal Radio Commission.

June 28, 1928 - Austrian Friedrich Schmiedl launched his first experimental rocket from a balloon 50,000 feet over Graz, Austria,. The rocket was not recovered, but later tests were successful leading to rocket delivered mail.

July 2, 1928 W3XK, owned by the Jenkins Television Corporation, went on the air becoming the first television broadcasting station in the US.

July 15, 1928 - Germany's ENIGMA machine encoded its first message. Cracking the EMIGMA during World War II brought together some of the finest minds in computer science at Bletchley Park in England.

September 11, 1928 - Radio station WGY of General Electric made the first simulcast in Schenectady, New York. A play called "The Queen's Messenger" had audio broadcast over radio with the picture in sync over television at same time.

November 6, 1928, the New York Times began flashing headlines outside its offices in Times Square using an electronic sign that wrapped around the 4th floor. And an icon was born.

November 18, 1928 – Steamboat Willie premiered at Universal's Colony Theater in New York City. It was the first fully synchronized sound cartoon, directed by Walt Disney and Ub Iwerks. It was the first official appearance of Mickey Mouse. Happy birthday Mickey, now give us back a reasonable public domain date.

1929

January 20, 1929 -The movie In Old Arizona was released. It was the first full-length talking motion picture in the US to be filmed outdoors.

THE THIRTIES

1930

February 25, 1930 - A US patent for a photographing apparatus was issued to George Lewis McCarthy, who called it a Checkograph. It was the first bank check photographing device.

April 18, 1930 - BBC Radio made the startling announcement that nothing terribly important had happened. Listeners who tuned in to hear the news bulletin were told, "There is no news." Piano music began subsequently.

August 20, 1930 - W2XCR began broadcasting at 2.1-2.2 mHz from Jersey City, New Jersey, with the first demonstration of telecasts meant for the home. A half-hour program, hosted by the cartoonist Harry Hirschfeld, was viewed on screens placed in a store in the Hotel Ansonia, the Hearst building, and a home at 98 Riverside Drive.

September 3, 1930 - An experimental electric engine was put in service by the Delaware, Lackawanna & Western Railroad between Hoboken and Montclair, NJ. Thomas Edison served as engineer at the throttle.

September 8, 1930 - The first roll of waterproof, transparent, pressure-sensitive tape was sold. Its brand name "Scotch" has become synonymous with cellophane tape.

November 11, 1930 - Albert Einstein, yes that Albert Einstein and Leo Szilard received a US patent for a refrigerator that required no electricity, just a heat source. Electrolux bought up the patents.

1931

February 2, 1931 - Friedrich Schmiedl launched the first rocket mail (V-7, Experimental Rocket 7) with 102 pieces of mail between Schöckl and St. Radegund, Austria.

March 18, 1931 - Jacob Schick began marketing his second electric razor. His first hadn't caught on because of the bulky motor. This time the more practical design became a hit.

May 27, 1931 - Auguste Piccard and Charles Knipfer took man's first trip into the stratosphere when they rode in a pressurised cabin attached to a balloon to an altitude of 51,800 feet.

June 9, 1931 - Robert Goddard received a patent for rocket-fueled aircraft design (US No. 1,809,271). Sadly we do not have a lot of rocket-planes in operation.

December 8, 1931 - US Patent No. 1,835,031 for a "concentric conducting system" was awarded to Lloyd Espenschied of Kew Gardens, New York, and Herman A. Affel of Ridgewood, New Jersey, and assigned to the American Telephone & Telegraph Co. Coaxial Cable had been patented.

1932

January 26, 1932 - the US Patent Office received a patent application for the cyclotron by Ernest Orlando Lawrence as a "Method and Apparatus for the Acceleration of Ions."

February 27, 1932 - English physicist James Chadwick published a letter on the existence of the neutron, some say giving birth to modern nuclear physics.

March 19, 1932 – The Sydney Harbour Bridge was opened. It is the world's largest (but not the longest) steel arch bridge with the top of the bridge standing 134 metres above the harbour.

August 22, 1932 – The BBC began public television broadcasts.

November 24, 1932 - The FBI Scientific Crime Detection Laboratory (known then only as the Technical Crime Laboratory) officially opened in Washington DC. It's location was chosen because it had a sink, and its one employee, Agent Charles Appel had to borrow a microscope.

1933

June 6, 1933 - The world's first drive-in movie theater opened in Camden, New Jersey. Richard Hollingshead Jr. had developed the system by using a 1928 Kodak projector mounted on the hood of his car and aimed at a screen pinned to some trees.

July 22, 1933 - Wiley Post returned to Floyd Bennett Field in Brooklyn, New York, 7 days, 18 hours, 49 minutes after leaving, becoming the fastest person to circumnavigate the Earth by air and the first to do it solo.

December 26, 1933 - Edwin Armstrong received a patent for his method of eliminating static in a radio broadcast using frequency modulation. He would license out the technology but many companies would embrace FM radio without his permission and he spent much of his later life battling in court.

1934

January 20, 1934 - Fuji Photo Film Co. Ltd., the photographic and electronics company known today as Fujifilm, was founded in Tokyo, Japan.

August 19, 1934 - Gordon Bell was born in Kirksville, Missouri. He would grow up to help build PDP computers and oversee the development of DEC's VAX series.

November 30, 1934 - The steam locomotive Flying Scotsman became the first to officially exceed 100 mph.

1935

January 24, 1935 - Krueger's Cream Ale and Krueger's Finest Beer went on sale in Richmond, Virginia in cans, developed by the American Can Company. Cans protected beer better than translucent bottles.

February 2, 1935 - Detective Leonarde Keeler, co-inventor of the Keeler polygraph, tried the lie detector on two suspected criminals in Portage, Wisconsin. Both suspects were convicted of assault.

February 26, 1935 - Scottish physicist Robert Watson-Watt demonstrated Radio Detection And Ranging to Air Ministry officials at Daventry, England. This RADAR proved quite helpful a few years later when war broke out.

March 28, 1935 - Robert Goddard launched the first rocket equipped with gyroscopic controls near Roswell, New Mexico. The rocket reached an altitude of 4,800 feet and flew 13,000 feet at a speed of 550 mph.

May 24, 1935 - General Electric Co. sold the first spectrophotometer. It could detect two million different shades of color and make a permanent record chart of the results.

May 29, 1935 - Workers poured the last concrete at the iconic Hoover Dam hydroelectric site. Four months later after the concrete was well and truly set, President Franklin Roosevelt dedicated the dam.

November 6, 1935 Edwin Armstrong presented his paper "A Method of Reducing Disturbances in Radio Signaling by a System of Frequency Modulation" to the New York section of the Institute of Radio Engineers, braving the skepticism of AT&T's John Renshaw Carson who wrote previously that FM radio had no particular advantages over AM.

December 16, 1935 - A Time magazine article described the use of the pattern of capillaries in the retina as a means of identification called eye prints. Hello biometrics!

April 11, 1936 - German computer pioneer Konrad Zuse filed for a patent for the automatic execution of calculations, and described combination memory, an early form of programmable memory. Zuse was working on what would become Germany's first computer, the Z-1.

May 12, 1936 - University of Washington education professor August Dvorak received a patent for his new more efficient keyboard layout. While widely recognised as superior to the QWERTY layout, the Dvorak keyboard is not widely used.

May 28, 1936 – Alan Turing submitted his paper "On Computable Numbers, with an Application to the Entscheidungsproblem" for publication in which he postulated hypothetical Turing Machines would be capable of performing any conceivable mathematical computation if it were representable as an algorithm.

June 12, 1936 - The first radio station with 500,000 watt power began testing as W8XAR in Pittsburgh, Pennsylvania. Test broadcasts took place from 1 AM to 6 AM. The station is now known as KDKA.

June 17, 1936 - Edwin Armstrong presented FM radio at FCC headquarters. Armstrong played a jazz record over conventional AM radio, then switched to an FM broadcast. "[I]f the audience of 50 engineers had shut their eyes they would have believed the jazz band was in the same room."

July 7, 1936 - Henry F. Phillips received patents for a new kind of screw and the screwdriver used with it. Endless numbers of computer cases have been held together by it since.

October 26, 1936 - The first electric generator went into full operation at Hoover Dam. About a month after President Roosevelt had dedicated the dam and tried to encourage people to call it the Boulder Dam.

November 2, 1936 - BBC Television Service went on the air with the world's first regular "high definition" service. Back then high definition meant 200 lines not 1080. The channel became BBC1 in 1964.

1937

February 21, 1937- Waldo Waterman flew the first test flight of the Arrowbile, and found the aircraft easy to fly and virtually spin and stall proof. It is considered the first flying car to successfully fly.

March 6, 1937 - Valentina Tereshkova was born in the Yaroslavl region of Russia. She would grow up to become the first woman in space and only woman ever to fly solo in space.

May 21, 1937 – North Pole-1 became the first scientific research station to operate on the drift ice of the Arctic Ocean. The Soviet Union established it about 20 km from the North Pole. It operated for 9 months, and travelled 2,850 kilometres.

August 18, 1937 - The first Frequency Modulation or FM radio permit was granted to W1XOJ, in Paxton, Massachusetts. It went on the air with scheduled programs in May 1939 and operated with the highest output power (50 kilowatts) granted previous to World War II.

December 21, 1937 - Walt Disney's first full-length animated film, Snow White and the Seven Dwarfs opened in Los Angeles, California. It ran 83 minutes. It was also the first animated film produced in color.

1938

August 26, 1938 - A New York radio station first used the Philips-Miller system of tape recording on a radio broadcast.

October 22, 1938 - Chester Carlson, tired of the exhaustive process of hand-copying or photographing patent paperwork, decided to make an easier way. On this date he produced the first electrophotographic image. Xerox would later make it automatic, popular, and make Carlson rich.

October 30, 1938 - Orson Welles owned the US radio audience with his famous broadcast of War of the Worlds. It was correctly introduced as theater but those not paying attention were fooled into thinking the play was the real thing.

December 31, 1938 - Cops in Indianapolis put Indiana University professor Rolla Harger's drunkometer to its first practical New Year's Eve test as a breath analyzer. Suspected tipplers blew into a balloon and the air was mixed with a chemical solution that turned darker the more alcohol was present. The drunkometer was replaced in 1958 by the more portable Breathalyzer.

1939

January 1, 1939 - In a garage in Palo Alto, California, William Hewlett and David Packard founded Hewlett-Packard a little company that made audio oscillators. And later TouchPads.

January 22, 1939 -John Dunning's Cyclotron split the uranium atom for the first time at Columbia University in New York City. And the Manhattan Project was on.

March 31, 1939 - Harvard and IBM signed an agreement to build the Mark I, also known as the IBM Automatic Sequence Controlled Calculator (ASCC). It weighed 5 tons and read data from paper tape and punch cards.

April 30, 1939 - RCA began regularly scheduled television service in New York City, with a telecast of President Franklin D. Roosevelt opening the New York World's Fair. Programs were transmitted from mobile camera trucks to the main transmitter, which was connected to an aerial atop the Empire State Building. The broadcasting division of RCA was called the National Broadcasting Corporation (NBC).

May 12, 1939 - The first appropriation was made to begin construction of the Harvard Mark I. When completed in 1944 the Mark I became the first successful fully automatic computing machine.

May 13, 1939 – Franklin Doolittle put experimental station W1XPW on the air, making it the first commercial FM radio station in the United States. The station later became WDRC-FM in Bloomfield, Connecticut.

November 4, 1939 - Packard Motor Company exhibited the first air-conditioned automobile at the 40th Automobile Show in Chicago, Illinois.

THE FORTIES

1940

February 29, 1940 - Ernest O. Lawrence delivered his 1939 Nobel Prize in Physics banquet speech in Berkeley, California, instead of the usual Sweden, so he could keep raising funds for his cyclotron research which got him the prize in the first place.

April 20, 1940 - Vladimir Zworykin and his team from RCA demonstrate the first electron microscope. It measured 10 feet high and weighed half a ton achieving a magnification of 100,000x.

April 23, 1940 - A patent was granted to Herman Anthony for a leak-proof dry-cell battery. The patent was assigned to Ray-o-Vac.

August 14, 1940 - John Atanasoff finished a paper describing the Atanasoff Berry Computer, or ABC, the computer he designed with Clifford Berry to solve simultaneous linear equations.

September 9, 1940 – At McNutt Hall at Dartmouth College, George Stibitz demonstrated the first remote operation of a computer. He connected to his Complex Number Generator at Bell labs by telephone using 28-wire teletype cable.

1941

March 29, 1941 - 80 percent of US AM radio frequencies were reassigned to new channels as part of the North American Radio Broadcasting Agreement.

May 9, 1941 - British destroyers captured a German U-110 submarine south of Iceland and recovered a naval version of the highly secret cipher machine known as Enigma. The sub was sunk to hide its capture and the machine taken to Bletchley Park where Alan Turing and other cryptographers broke the naval code.

May 12, 1941 - German engineer Konrad Zuse unveiled the Z3, the first program-controlled electromechanical digital computer. It succeeded the Z1 which was the first binary digital computer.

May 31, 1941 - Electric eye detectors were first used to measure high-jumping height attained. A track meet of the Schenectady, NY, Patrolmen's Association used equipment designed by General Electric, comprising of a movable light source and four electric eyes.

June 14, 1941 - John Mauchly visited John Atanasoff in Iowa City to see his computer. The two computer pioneers later battled in court over who was the legal inventor of the electronic digital computer.

October 19, 1941 - The Smith-Putnam Wind Turbine first fed AC power to the electric grid on Grandpa's Knob in Castleton, Vermont, becoming the first wind machine to do so. The 1.25 MW turbine operated for 1100 hours before a blade failed.

1942

August 11, 1942 - Hedy Markey and composer George Antheil received a US patent for a frequency-hopping device. The technique has led to many advancements in wireless technology including Wi-Fi. Markey was better known under her stage name of Hedy Lamarr.

October 3, 1942 - Germany conducted the first successful test of the V-2/A4 rocket, launched from Test Stand VII at Peenemünde. It traveled 118 miles.

December 2, 1942 - Enrico Fermi, Leo Szilard and their colleagues achieved a successful nuclear fission chain reaction in a squash court underneath the football grandstand of the University of Chicago's Stagg Field. The atomic age had begun.

December 10, 1942 - Germany conducted the first powered test flight of a V-1 Rocket, launched from beneath an Fw-200.

1943

April 10, 1943 - Researchers at the University of Pennsylvania began work on the Electronic Numerical Integrator and Computer known as ENIAC. The machine that was synonymous for years with computer, could perform 5,000 additions per second.

May 17, 1943 - The US Army and the University of Pennsylvania signed a contract to further develop ENIAC. It was planned to use vacuum tubes and calculate ballistic firing tables.

May 31, 1943 - Chief consultant John Mauchly and chief engineer John Presper Eckert began leading the military commission on the new computer ENIAC. They would take one year to design the computer and 18 months to build it.

June 10, 1943 - Hungarians László and Georg Bíró, while living in Argentina, patented the first successful implementation of the ballpoint pen.

June 23, 1943 - Vint Cerf was born in New Haven, Connecticut. He grew up to become known as one of the fathers of the Internet. most famously for his co-creation of the protocols underlying TCP/IP.

August 6, 1943 - Jon Postel was born in Altadena, California. He created the Internet's address system, and administered it for 30 years as director of the Internet Assigned Numbers Authority (IANA).

1944

April 17, 1944 - Harvard University President James Conant wrote to IBM founder Thomas Watson Sr. to let him know that the Harvard Mark I was operating smoothly. It was used in conjunction with the US Navy Bureau of Ships.

April 25, 1944 - Lt. Carter Harman of the 1st Air Commando Group rescued four men from the jungle in Burma Flying a Sikorsky YR-4 helicopter. It was the first combat rescue by helicopters in the US Army Air Forces.

June 1, 1944 - The Colossus Mark 2 was put into service at Bletchley Park in Great Britain, just in time for the invasion at Normandy.

June 13, 1944 - Germany launched the first guided missile attack in history, sending V-1 rockets into London.

August 7, 1944 - IBM officially presented the Mark I computer, also known as the IBM Automatic Sequence Controlled Calculator, or ASCC, to Harvard. The computer produced reliable results and ran continuously.

August 17, 1944 - Larry Ellison was born in the Bronx in New York City. 9 months later after contracting pneumonia he was taken to Chicago to be raised by his Aunt and Uncle. He would grow up to drop out of college, move to Berkeley and co-found Software Development Labs, one of the most successful corporations in history. Today it's known as Oracle.

December 10, 1944 - Paul Otlet died. His theories presciently described a global interlinked "web" of documents, presaging the World Wide Web almost 50 years before its invention.

1945

March 29, 1945 - German soldiers blew up the launch tracks for the V-1 rocket site near Letelle, Netherlands, ending the rocket attacks.

May 25, 1945 - Arthur C. Clarke began privately circulating copies of his paper ""The Space-Station: Its Radio Applications" which suggested geostationary space stations could be used for worldwide television broadcasts.

June 30, 1945 - The first draft of a Report on the EDVAC, was published. It discussed the advantages of using just one large internal memory, in which instructions as well as data could be held.

July 16, 1945 - The United States detonated a plutonium-based test nuclear weapon at the Alamogordo Bombing and Gunnery Range in New Mexico. The Trinity test ushered in the atomic age.

October 30, 1945 - The first conference on Digital Computer Technique was held at MIT. The National Research Council, Subcommittee Z on Calculating Machines and Computation sponsored the conference.

1946

February 13, 1946 - ENIAC (the Electronic Numerical Integrator and Calculator) the first practical, all-electronic computer was unveiled at the University of Pennsylvania's Moore School of Electronics. The New York Times carried the report the next day.

February 15, 1946 A few days after its first public demonstration, the first practical all-digital computer, ENIAC was formally dedicated.

May 10, 1946 – The US launched its second V-2 rocket at White Sands Proving Ground, which became the first successful launch of a large

rocket on US soil. The rocket climbed straight up then pitched to the north reaching an altitude of 71 miles and impacted about 35 miles uprange.

May 16, 1946 - At the meeting of the Institute of Radio Engineers (IRE, now IEEE) in San Francisco, Jack Mullin demonstrated the world's first professional-quality tape recorded in the US.

June 17, 1946 - The first mobile telephone call was made from a car in St. Louis, Missouri.

July 8, 1946 - The University of Pennsylvania's Moore School of Electrical Engineering began summer school course on computing that inspired the EDSAC, BINAC, and, many other similar computers.

November 12, 1946 - The US Army held a contest between an abacus used by Kiyoshi Matsuzaki from Japan's postal ministry and an electric calculator operated by Private Thomas Nathan Wood. The abacus won 4 to 1.

1947

February 21, 1947 - Edwin H. Land demonstrated his one-step instant camera and film at a meeting of the Optical Society of America. The first Polaroid camera was on sale within two years.

February 28, 1947 - The first closed-circuit broadcast of a surgical operation showed procedures to observers in classrooms at Johns Hopkins University.

April 19, 1947 - A report appeared in Billboard magazine of the first public demonstration of the Jerry Fairbanks Zoomar lens. The National Broadcasting Company in New York City conducted the demo and the zoom lens soon became standard TV equipment.

July 6, 1947 - The AK-47 went into production in the Soviet Union -- the name stands for Automatic rifle Kalashnikov model of 1947.

July 29, 1947 - ENIAC was switched on after being transferred to the Aberdeen Proving Ground, Maryland. It operated continuously until October 2 1955.

August 18, 1947 - Eight years after William Hewlett and David Packard founded it, Hewlett-Packard was officially incorporated.

September 6, 1947 - The aircraft-carrier Midway became the first US vessel from which a long-range rocket was launched. The rocket had a mishap though, and exploded at 5,000 feet.

September 9, 1947 - While troubleshooting the Harvard University Mark II Aiken Relay Calculator, operators found a moth trapped between the points of relay #70 in Panel F. They affixed the bug to the log and wrote "First actual case of bug being found." While this was not the first use of the term 'bug' for a computer problem, 'debugging' became popular for fixing bugs after this case.

September 15, 1947 - The Association for Computing Machinery was founded as the Eastern Association for Computing Machinery at a meeting at Columbia University in New York. It developed into the world's largest organization of computer professionals.

September 15, 1947 – RCA released the 12AX7 vacuum tube for public sale. The miniature dual triode vacuum tube with high voltage gain became popular with tube amplifier enthusiasts and has been in continuous production since.

October 9, 1947 - Eckert-Mauchly Computer Co. signed a contract with Northrop to develop the BINary Automatic Computer. BINAC was the only computer ever built by the company founded by ENIAC pioneers J. Presper Eckert and John Mauchly.

November 17, 1947 – Walter Brattain dumped a semiconductor experiment into a thermos of water and unexpectedly saw a large amplification of electricity. Working with John Bardeen they developed it into a new amplifier that would eventually be called the transistor.

December 16, 1947 - John Bardeen and Walter Brattain applied two closely-spaced gold contacts held in place by a plastic wedge to the surface of a small slab of high-purity germanium. It was later called the Transistor.

December 23, 1947 - John Bardeen and Walter Brattain demonstrate their new discovery transistor at Bell Laboratories in Murray Hill, New Jersey. William Shockley, who contributed to the invention, missed the presentation.

1948

January 5, 1948 - Warner Brothers showed the very first colour newsreel, featuring the Tournament of Roses Parade and the Rose Bowl football game.

January 27, 1948 - IBM dedicated its "SSEC" in New York City. The Selective Sequence Electronic Calculator handled both data and instructions using electronic circuits made with 13,500 vacuum tubes and 21,000 relays.

March 9, 1948 - The University of California at Berkeley and the Atomic Energy Commission announced the artificial production of mesons using the 184-inch cyclotron at the university's Radiation Laboratory.

March 17, 1948 - William Gibson was born in Conway, South Carolina. His stories are credited with launching cyberpunk literature, named after the phrase he used in the story "Burning Chrome".

June 3, 1948 - Ed Brown Jr., a former Navy pilot, opened a fly-in movie theater near Wall Township, New Jersey. You could also drive in. The theater had space for 500 cars and 25 small planes could land in a nearby airfield and taxi over to the theater.

June 21, 1948 - The Small-Scale Experimental Machine, SSEM took 52 minutes to run its first program, written by Professor Tom Kilburn. SSEM was the first computer to store programs electronically.

June 30, 1948 - Bell Labs introduced the point-contact transistor demonstrated by its inventors, John Bardeen and Walter Brattain at a press conference in Murray Hill, NJ.

June 30, 1948 - The FCC authorisation of recording devices in connection with interstate or foreign telephone service went into effect. Users of the service had to be given adequate notice including a tone warning signal at regular intervals.

1949

January 10, 1949 - In response to Columbia's new 33-RPM long playing record, RCA kicked off a platter war introducing the the 7-inch diameter 45 rpm "single" in the US

January 17, 1949 - The first synchrotron installed at the Radiation Laboratory at the University of California, Berkeley, reached its design energy of 300 MeV.

January 26, 1949 - The Hale telescope at Palomar Observatory saw first light under the direction of Edwin Hubble, becoming the largest aperture optical telescope. Hubble photographed Hubble's Variable Nebula (NGC 2261).

February 24, 1949 - A modified German V-2 ballistic missile launched from White Sands Missile Range in New Mexico, reached an altitude of 244 miles, putting it well above the Kármán line. It was the first US rocket to reach "outer space."

May 6, 1949 - The EDSAC, the first practical stored program computer, performed its first calculation. It operated at a speed of 714 operations per second.

May 25, 1949 - Josef Carl Engressia, Jr. was born in Richmond, Virginia. He would later go by the name Joybubbles and develop a talent to whistle at 2600 Hz, allowing him to control phone switching equipment.

June 8, 1949 - George Orwell's book Nineteen Eighty-Four was published. The book still affects notions of privacy and inspired the iconic Apple commercial that introduced the Macintosh computer.

June 15, 1949 - Jay Forrester wrote down a proposal for core memory in his notebook. Core memory was the standard for computer memory until advances in semiconductors in the 1970s.

July 12, 1949 - At an IBM sales meeting, Thomas J. Watson Jr. predicted that within 10 years, electronics would replace moving parts in machines. His vision launched IBM into dominating the computer industry.

July 27, 1949 – The first jet-powered airliner, the de Havilland Comet, made its first flight. Previously jet engines had only been used to power small fighter aircraft.

October 21, 1949 - An Wang filed a patent for a magnetic ferrite core memory, that he called pulse transfer controlling devices. Two years later he formed Wang computers.

December 29, 1949 - TV station KC2XAK of Bridgeport, Connecticut became the first Ultra high frequency (UHF) television station to operate a daily schedule.

THE FIFTIES

1950

January 24, 1950 - Percy LeBaron Spencer received a patent for a "Method of Treating Foodstuffs" which we would recognise as the Microwave Oven.

In 1950 - Bell Telephone Laboratories announced the invention of a new kind of electric eye called the phototransistor. Dr. John Northrup Shive invented the transistor, which operated by light rather than electricity.

July 24, 1950 - The Bumper 8, made of a German V-2 missile lower stage and WAC-Corporal upper stage launched from the Cape Canaveral Air Force Station. It was the first launch from what would become the Kennedy Space Center.

August 11, 1950 - Steve Wozniak was born in San Jose, California. He would grow up to invent the first successful personal computer, and revolutionize desktop computing.

October 11, 1950 - CBS's mechanical color system is the first to be licensed for broadcast by the FCC. Color TV would not become widespread until the late 1960s.

1951

February 1, 1951 -TV viewers witnessed the live detonation of an atomic bomb blast, as KTLA in Los Angeles broadcast the explosion of a nuclear device dropped on Frenchman Flats, Nevada.

1951 - The Census UNIVAC System was accepted and subsequently devoted almost exclusively to tabulating results of the 1950 Census of Population and Housing. It was the first UNIVAC and was capable of completing 1,905 operations per second, which it stored on magnetic tape.

April 5, 1951 - Dean Kamen was born in Rockville Centre, New York. He grew up to found DEKA Research in 1982 which developed a portable dialysis machine, a vascular stent, and the iBOT -- a motorized wheelchair that climbs stairs. Oh and the Segway.

May 11, 1951 - Jay Forrester filed a patent application for matrix core memory. Professor Forrester led a team at MIT that developed a three-dimensional magnetic structure code-named Project Whirlwind. It was the first random access memory that was practical, reliable and relatively high-speed.

June 14, 1951 - The US Census Bureau officially put UNIVAC I into service calling it the world's first commercial computer.

July 4, 1951 - Bell Labs held a press conference announcing the invention of the junction transistor. Dr. William Shockley was featured at the conference.

July 16, 1951 - VisiCalc creator Dan Bricklin was born in Philadelphia.

July 29, 1951 - A recording was made of Beethoven's 9th by EMI that eventually became used to justify the diameter of the CD.

December 20, 1951 - In Idaho, the Experimental Breed Reactor no. 1 aka EBR-1 became the first power plant to produce electricity using atomic energy. It would take 2 more years to prove it could create more fuel than it consumed.

1952

May 7, 1952 - British radar engineer Geoffrey Dummer introduced the concept of the integrated circuit at the Symposium on Progress in Quality Electronic Components in Washington, D.C.

May 21, 1952 - IBM announced the Model 701, the first computer designed for scientific calculation. The 701 used electrostatic storage tube memory and kept information on magnetic tape. It sold much better than expected with 19 governments and large companies snapping them up.

November 4, 1952 - The UNIVAC computer projected General Dwight David Eisenhower would defeat Adlai Stevenson for President of the US. All the polls showed Stevenson had a clear advantage so CBS delayed using the projection fearing inaccuracy. Oh how times have changed.

December 29, 1952 - The first hearing aid using a junction transistor went on sale, the model 1010 manufactured by the Sonotone Corporation in Elmsford, NY, US

1953

March 17, 1953 - Australian researcher David Warren came up with the idea for a device to record cockpit noise and instruments during flight. His ARL Flight Memory Unit would eventually be known as the Black Box.

April 8, 1953 - The major studios were inspired by the 1952 3D hit Bwana Devil. Columbia beat Warner Brothers' House of Wax to the theatre to make Man in the Dark the first 3D motion picture produced and released by a major studio.

April 25, 1953 – Watson and Crick's presented their findings on the double helical structure of DNA in the publication Nature. They noted that the structure "suggests a possible copying mechanism for the genetic material." 50 Years later the Human Genome Project would publish a follow-up in Nature after sequencing the genome.

April 29, 1953 – KECA-TV an ABC affiliate in Los Angeles, California broadcast the first US experimental 3D-TV. An episode of Space Patrol required specially polarized glasses to watch.

December 15, 1953 - Dudley Buck entered the idea for the Cryotron into his MIT notebook. The cryotron is a four-terminal superconductive computer component.

1954

January 7, 1954 - In New York at IBM headquarters, IBM and Georgetown University showed off their joint project on machine translation. More than 60 sentences were translated from Russian to English using 8 grammar rules.

January 11, 1954 - BBC TV broadcast their first 'in-vision' weather forecast on TV. George Cowling of the Meteorological Office presented from the BBC's Lime Grove studios with two hand-drawn weather charts pinned to an easel.

February 28, 1954 – The Westinghouse H840CK15 went on sale in the New York area. It is generally agreed to be the first production receiver using NTSC color offered to the public. Only 30 sets were sold at $1295 a pop.

April 4, 1954 - Daniel Kottke was born in Bronxville, New York. Who would go on to befriend Steve Jobs at Reed College, assemble the first Apple Computers with Steve Wozniak and work on the original Macintosh team.

May 17, 1954 - The first shovel load of earth was dug on the Meyrin site of the first CERN Laboratory building in Geneva.

June 7, 1954 - Computer science hero Alan Turing killed himself by eating an apple containing cyanide. Turing formulated the famous Turing test and broke code at Bletchley park during World War II.

June 26, 1954 - At 5:30 PM the world's first nuclear power station was connected to the power grid Obninsk, USSR., a small town 60 miles south of Moscow.

July 5, 1954 - The BBC broadcast its first daily television news bulletin. Richard Baker read the 20-minute bulletin billed as an "Illustrated summary of the news."

September 6, 1954 - US President Eisenhower waved a ceremonial "neutron wand" over a neutron counter in Denver, Colorado, to signal a bulldozer in Shippingport, Pennsylvania to begin construction on the first commercial nuclear power plant. It was part of the "Atoms for Peace" program.

September 20, 1954 - John Backus and his team at IBM ran the first FORTRAN program. FORTRAN stands for FORmula TRANslation and was the first high-level language and compiler developed.

September 29, 1954 - CERN officially came into being. In addition to countless advancements in science, it would go on to foster the invention of the World Wide Web.

September 30, 1954 - The USS Nautilus, the first nuclear submarine, was commissioned at Groton, CT.

October 3, 1954 - John Bardeen, Walter Brattain, and William Shockley received US patents for circuits what would eventually be called the transistor.

October 7, 1954 - IBM sounded the death knell of vacuum tubes, building the first calculating machine to use solid-state transistors. It was an experimental version of the IBM 604 Electronic Calculating Punch, that was desktop-sized and slow just like it's vacuum-tube powered brother, but it used 5% of the power!

October 18, 1954 - Texas Instruments announced the Regency TR-1, the first transistor radio, produced jointly with the Regency Division of Industrial Development Engineering Associates in Indianapolis. TI executive Vice President Pat Haggerty hoped the product would show what transistors could do and spur demand.

1955

February 24, 1955 - A boy was born to University of Wisconsin graduate students Joanne Simpson and Abdulfattah Jandali. He was given up for adoption and taken in by a machinist and his wife in Mountain View, California. They named him Steve Jobs.

March 8, 1955 - Doug Ross demonstrated the Director tape for MIT's Whirlwind machine, the first digital computer with real-time text and graphics. The idea of the Director Tape was to allow multiple problems to be read by the computer in one session without humans having to intervene and change tapes. In other words, it was an operating system.

June 8, 1955 - Tim Berners-Lee was born in London. He grew up to develop the World Wide Web.

August 7, 1955 - Tokyo Telecommunications Engineering released Japan's first commercially produced transistor radio, the TR-55, sold under the company's new name, Sony.

August 22, 1955 - The first computer user group, SHARE, was founded by users of IBM's Model 704 computer. The first meeting was held in the basement conference room of the RAND Corporation.

October 2, 1955 - ENIAC was shut down for the last time. After 11 years running at 5,000 operations a second and taking up 1,000 square feet of floor space, it deserved its retirement.

October 25, 1955 Tappan introduced the first microwave oven for home use. It sold for $1,295. Raytheon developed the Radarrange after engineer Percy LeBaron Spencer was working on an active radar set and accidentally melted a candy bar in his pocket.

October 28, 1955 - A pair of proud Seattle parents welcomed their new son, William Henry Gates the third, into the world, having no idea he would become one of the most loved and hated man of all time. You know him as Bill.

December 24, 1955 - After an advertising misprint Continental Air Defense Command, CONAD started getting calls from children for Santa Claus, so Director of Operations Colonel Harry Shoup, had his staff check the radar for signs of St. Nick. NORAD was created in 1958 and they've kept up the tracking tradition ever since.

1956

April 14, 1956 – Ampex demonstrated the VRX-1000 videotape recorder at the National Association of Radio and Television Broadcasters Convention in Chicago. It was the first successful commercial videotape recorder.

July 4, 1956 - The five-year-old MIT computer Whirlwind added the ability to input data directly with a keyboard. Programmers began to enjoy independence from punch cards.

September 4, 1956 – IBM introduced the IBM 350 Disk storage unit for the RAMAC 305, the first commercial computer to use magnetic disk storage.

September 25, 1956 – The first submarine transatlantic telephone cable system, TAT-1 was inaugurated, replacing slow telegraph and unreliable radio systems.

October 15, 1956 - Fortran, the first modern computer language was shared with the public for the first time. The IBM Mathematical Formula Translating System made John Backus a legend, kicked off modern programming, and is still developed to this day by the Fortran Standards Technical Committee.

1957

January 3, 1957 - Hamilton Electric held a press conference to announce the World's First Electronic Watch, the Hamilton Electric 500, a watch that never needed winding. Just batteries.

January 21, 1957 - NBC taped and broadcast President Dwight D. Eisenhower's second inauguration address, further popularizing the taping of video.

February 6, 1957 - MIT introduced the cryotron, the first practical demonstration of superconductivity, invented by Dudley Allen Buck. The Cryotron paved the way for the integrated circuit which used semiconductivity.

April 11, 1957 - The Ryan X-13 Vertijet took off from Edwards Air Force base flew for a few minutes and landed. The significant part of the short flight was that it took off and landed vertically, becoming the first jet capable of doing so.

April 19, 1957 - The first non-test FORTRAN program ran at Westinghouse. It produced a missing comma diagnostic. A successful attempt followed shortly after.

October 4, 1957 -The Soviet Union launched Sputnik I, becoming the first artificial satellite to orbit the Earth, and motivating the US to get into gear and heat up the space race.

October 11, 1957 - The Jodrell Bank observatory, with the world's largest radio telescope, designed by Sir Bernard Lovell, began operation. It's first job was to track the just-launched Sputnik satellite.

November 3, 1957 - The Soviet Union launched Sputnik 2 carrying the first animal ever to enter orbit, a dog named Laika. It would go on to inspire the saddest Jonathan Coulton song ever, space doggity and the band Laika and the Cosmonauts.

November 25, 1957 - PG&E and General Electric inaugurate the Vallecitos Nuclear Power Plant in Pleasanton California. It is the first privately funded atomic power plant.

December 6, 1957 - Responding to Sputnik, the United States launched the Vanguard TV3. The rocket only made it a little over a meter off the launchpad before it fell back and was destroyed. A fuel leak was thought to have caused the failure.

1958

January 4, 1958 - Sputnik I the first manmade object to orbit the earth, fell back into the atmosphere and disintegrated, after 92 days in space.

January 31, 1958 - The United States entered the space age with the successful launch of the Explorer I satellite. Data from the satellite confirmed the existence of the Van Allen radiation belt circling the Earth.

February 10, 1958 - Scientists at Lincoln Laboratory at MIT bounced radar signals off the planet Venus, calling it the first measurement of interplanetary distances.

March 17, 1958 – The United States launched the Vanguard 1 satellite, achieving the highest altitude of any man-made vehicle to that time.

May 13, 1958 – The trademark Velcro was registered, protecting the name of the multi-purpose material that manages cables everywhere.

May 20, 1958 - Robert Baumann obtained a patent for a satellite. (US No. 2,835,548). The patent stipulated the government could use the technology without having to pay royalties.

July 29, 1958 - President Eisenhower signed the National Aeronautics and Space Act, creating the National Aeronautics and Space Administration.

August 3, 1958 - The nuclear submarine USS Nautilus became the first watercraft to reach the geographic North Pole. Commanding Officer, Commander William R. Anderson, announced to his crew, "For the world, our country, and the Navy - the North Pole."

October 1, 1958 - The National Advisory Committee of Aeronautics was officially absorbed by the brand new National Aeronautics and Space Agency. Another expanded government bureaucracy that was only good for putting people on the moon.

October 11, 1958 - NASA launched the lunar probe Pioneer 1 the first of the Pioneer program. It didn't get very far, falling back to Earth and burning up in the atmosphere.

December 19, 1958 - The first known radio broadcast from outer space was transmitted. US President Eisenhower spoke from a pre-recorded aboard the Project SCORE experimental satellite. Redundancy paid off as the first recorder failed but the backup worked.

1959

January 2, 1959 - Luna 1, the first spacecraft to reach the Moon, was launched by the USSR.

February 6, 1959 – Jack Kilby of Texas Instruments filed a patent for miniaturized electronic circuits, the first patent for what we now call integrated circuits.

February 28, 1959 – Discoverer 1 was launched on a Thor-Agena A rocket and became the first man-made object ever put into a polar orbit.

March 15, 1959 - The first atomic reactor built in the US for medical research, achieved criticality at Brookhaven National Laboratory in Upton, N.Y.

April 8, 1959 – The Department of Defense called a meeting at the University of Pennsylvania to define the objectives for a new Common Business Language. Captain Grace Hopper led the group that kicked off COBOL.

April 9, 1959 – NASA publicly announced the selection of the United States' first seven astronauts, who quickly became known as the "Mercury Seven".

April 16, 1959 - The programming language LISP had its first public presentation. Created by John McCarthy, LISP offered programmers flexibility in organization.

May 1, 1959 - Shortly after construction had begun, NASA's Goddard Space Flight Center in Greenbelt, Maryland was officially named in honor of the pioneering rocket scientist.

May 27, 1959 - After almost a decade, MIT shut down its Whirlwind computer. It ran 35 hours a week at 90 percent utility using an electrostatic tube memory.

May 28, 1959 - A committee of government, military and business computer experts met at the Pentagon and laid the foundations for the COBOL computer language.

May 30, 1959 - The first experimental hovercraft, Christopher Cockerell's SRN-1 made its first trials at Cowes on the Isle of Wight.

July 25, 1959 - Christopher Cockerell's Hovercraft crossed the English Channel for the first time, celebrating the 50th Anniversary of Frenchman Louis Bleriot's historic first cross-Channel heavier-than-air flight.

September 14, 1959 - After 33.5 hours of flight, Luna 2 became the first human-made object to strike the moon.

September 16, 1959 – The first successful photocopier, the Xerox 914, was introduced at the Sherry-Netherland hotel in New York City. ONe caught fire. The demo that was carried live on television did not catch fire.

October 7, 1959 - The Soviet Space Probe Luna 3 took the first photographs of the dark side of the moon. You're welcome Pink Floyd.

October 16, 1959 - Control Data Corp. released its model 1604 computer, the first from William Norris's group that left Sperry Rand Corp.

December 25, 1959 - Sony announced its first television set, the transistor-based TV-301. It would go on sale in Japan the following May.

December 29, 1959 - Physicist Richard Feynman gave a talk called "There's Plenty of Room at the Bottom", in which he suggested it should be possible to make nanoscale machines that can arrange atoms the way we want. So happy birthday nanotechnology.

THE SIXTIES

1960

January 23, 1960 - With a crew of two, the bathyscaphe Trieste, descended 10,911 meters in the Pacific Ocean into Challenger Deep in the Mariana Trench near Guam, the deepest known point in the oceans.

January 28, 1960 - The Communications Moon Relay System was inaugurated publicly when a facsimile picture of the USS Hancock was transmitted wirelessly by radio wave to Washington DC, by being bounced off the moon.

March 22, 1960 - Arthur Schawlow and Charles Hard Townes were granted the first patent for a laser (US No. 2,929,922) under the title "Masers and Maser Communications System."

April 13, 1960 – The United States launched Navy Transit 1-B. It demonstrated the first engine restart in space and more famously the feasibility of using satellites as navigational aids, proving systems like GPS would work.

May 10, 1960 - The nuclear-powered USS Triton submarine, arrived in Groton, Connecticut, after completing the first completely submerged circumnavigation of Earth.

May 16, 1960 - While working at the Hughes Research Laboratories of the Hughes Aircraft Company in Malibu, California, physicist Theodore Maiman used a synthetic-ruby crystal to create the first laser.

July 20, 1960 - In a first for missiles, a Polaris A1 test vehicle was successfully launched from the USS George Washington submarine off the coast of Cape Canaveral, Florida.

August 12, 1960 - The first NASA communications satellite, Echo 1 was launched from Cape Canaveral. The satellite was a balloon of Mylar polyester film.

August 15, 1960 - A long-distance phone link was tested using the Echo 1 satellite. William Victor placed a call from the Jet Propulsion Laboratory at Goldstone, California to William C. Jakes Jr. at the Bell Laboratories in Holmdel, New Jersey, bouncing off the satellite to make the connection.

September 26, 1960 - For the first time, a US presidential debate was televised. Vice President Nixon and Senator Kennedy debated in Chicago and were perceived differently by those who listened on radio versus those who watched on television.

November 7, 1960 - The JOSS (Johniac Open Shop System) conversational time-sharing service began on the Rand Corporation's Johnniac computer. Time sharing reduced the time programmers had to wait after turning in their punch cards.

1961

January 31, 1961 - The US launched a 4-year-old male chimpanzee named Ham on a Mercury-Redstone 2 rocket into suborbital flight to test the capabilities of the Mercury capsule.

March 9, 1961 – Sputnik 9 successfully launched, carrying a human dummy and and the dog Chernushka. It completed 1 orbit and was successfully recovered upon return. Yes, the dog made it back unharmed.

April 12, 1961 - Yuri Gagarin of the USSR made a 108-minute orbital flight in the Vostok 1 spacecraft, becoming the first human in space.

April 25, 1961 - Robert Noyce received the US patent for the silicon-based integrated circuit. He went on to found the Intel Corporation with Gordon E. Moore in 1968. Noyce fought a long patent rights battle with Jack Kilby who invented a germanium-based integrated circuit.

May 5, 1961 - First NASA astronaut Alan Shepard piloted the Freedom 7 Mercury capsule on its 15-minute 28-second suborbital flight.

May 19, 1961 – Venera 1 became the first manmade object to fly-by another planet by passing within 100,000 KM of Venus. The probe did not send back any data having lost contact with Earth a month earlier.

May 24, 1961 - Wes Clark began working on the Laboratory Instrument Computer (LINC), at MIT's Lincoln Laboratory. It was one of the earliest examples of a user-friendly machine that you could communicate with while it operated. It's credited with setting the standard for personal computer design.

May 25, 1961 - US President John F. Kennedy delivered a speech to Congress declaring the United States would go to the Moon.

July 19, 1961 - Trans World Airlines began offering regular in-flight movies on scheduled flights. The first film shown, only in the first class cabin, mind you, was "By Love Possessed," starring Lana Turner and Efrem Zimbalist Jr.

1962

January 10, 1962 - NASA announced plans to build the C-5, a three stage rocket launch vehicle. It became better known as the Saturn V Moon rocket, which launched every Apollo Moon mission.

February 20, 1962 - Following the USSR, the United States put its first man into orbit. John Glenn piloted the Mercury-Atlas 6 Friendship 7 spacecraft to a successful conclusion of the mission.

April 21, 1962 - President John F. Kennedy opened the Seattle World's fair by telephone from Palm Beach, Florida. He pressed a gold telegraph key, which focused an antenna at Andover, Maine and a Navy radio

telescope station in Maryland on a star to pick up a 10,000 year-old radio signal. That in turn set in motion various exhibits at the fair.

July 10, 1962 - The world's first communication satellite, Telstar, was launched into orbit from cape Canaveral on a Delta rocket.

July 22, 1962 - The first Mariner space probe to Venus had to be destroyed shortly after lift-off because of "improper operation of the Atlas airborne beacon equipment." The error was caused by a missing overbar in the program that must have disappeared during hand transcription.

August 27, 1962 – NASA launched the Mariner 2 unmanned space mission to Venus.

September 12, 1962 - US President John F. Kennedy delivered a speech at the stadium of Rice University, declaring, "We choose to go to the moon." Many consider the speech the beginning of the space race.

December 13, 1962 - NASA "Relay 1" launched, the first active repeater communications satellite in orbit.

1963

June 16, 1963 - Soviet Cosmonaut Valentina Tereshkova became the first woman to fly in space, orbiting the Earth 48 times.

June 20, 1963 – A hotline was established between the Soviet Union and the United States following the Cuban Missile Crisis. While later it would become the famous "red telephone" it started as a teletype.

June 24, 1963 - The first demonstration of a home video recorder was made at the BBC News Studios in London. A Telcan, short for television in a can, could record up to 20 minutes of black and white television using quarter-inch tape on a reel-to-reel system.

August 6, 1963 - Kevin Mitnick was born in Van Nuys, California. He would grow up to become the world's most wanted hacker, and then one of the world's most sought after security experts.

August 30, 1963 – A direct line of communication between the leaders of the USA and USSR, dubbed "The Hotline" began operation.

November 1, 1963 - The largest radio telescope ever constructed, the Arecibo observatory opened in Arecibo Puerto Rico. It would be used for many major discoveries including the first direct imaging of an asteroid.

November 22, 1963 - One of the most famous 8mm home movies ever recorded was filmed on a Model 414 PD Bell and Howell in Dealey Plaza in downtown Dallas, Texas. The Zapruder film showed President John F. Kennedy and Governor John Connally being shot.

November 23, 1963 - At 6:15 PM the BBC premiered its new family science fiction show, Doctor Who, with its first episode, "An Unearthly Child."

December 7, 1963 - The CBS broadcast of the college football game between Army and Navy featured the first use of video instant replay during a sports telecast. Some people got confused and called to complain.

1964

January 12, 1964 - Jeff Bezos was born in Albuquerque, New Mexico. He would grow up to study computer science at Princeton, and set the standard for online shopping with his company, Amazon.com.

April 7, 1964 - IBM unveiled the System/360 line of mainframe computers, its most successful computer system. Called the "360" because it was meant to address all possible sizes and types of customer with one unified software-compatible architecture.

April 20, 1964 - The first AT&T picturephone transcontinental call was made between test displays at Disneyland and the New York World's Fair.

April 21, 1964 – Satellite Transit-5BN-3 failed to reach orbit after launch. It dispersed 2.1 pounds (0.95 kg) of radioactive plutonium in its SNAP RTG power source.

May 1, 1964 - Thomas Kurtz and John Kemeny of Dartmouth College, launched a time-sharing system using a language meant to be learned quickly, called BASIC.

October 10, 1964 - The opening ceremonies of the summer Olympics in Tokyo became the first Olympic broadcast relayed live by geostationary communication satellite. Too bad all the US networks gave up on live broadcasts of the Olympics.

November 28, 1964 - NASA launched Mariner 4 toward Mars where it would conduct the first successful flyby of the red planet.

1965

February 17, 1965 – The Ranger 8 probe launched on its mission to photograph the Sea of Tranquility on the Moon. The photos paved the way to select the area as the site of the first manned Moon landing.

March 18, 1965 – The Voskhod 2 launched and on the second orbit Cosmonaut Aleksei Leonov left the capsule (on purpose) for 12 minutes, becoming the first person to walk in space.

March 21, 1965 – NASA launched Ranger 9, the last in a series of unmanned lunar space probes. Ranger 9 slammed into the Moon sending back high-resolution pictures of the Lunar surface before impact.

April 6, 1965 – Hughes Aircraft's Early Bird launched into orbit. It was the first communications satellite to be placed in synchronous orbit and successfully demonstrated the concept of synchronous satellites for commercial communications.

April 19, 1965 - "Cramming more components onto integrated circuits" by Gordon Moore was published in *Electronics*. Moore projected that over the next ten years the number of components per chip would double every 12 months. By 1975 he turned out to be right, and the doubling became immortalized as Moore's law.

June 3, 1965 – Gemini 4 launched on the first multi-day space mission by a NASA crew. Crewmember Ed White performed the first US spacewalk.

June 28, 1965 - Officials in the US and Europe conducted the first commercial telephone conversation over satellite Early Bird I. The satellite also began operation for television transmission "live via satellite" as well.

July 14, 1965 - The Mariner 4 did a flyby of Mars, taking 21 full pictures, the first close-up photos of another planet returned from space.

August 11, 1965 - Shinji Mikami was born in Japan. He grew up to become a video game designer for Capcom, revolutionizing survival-horror games with his popular series, Resident Evil.

August 29, 1965 - Astronaut L. Gordon Cooper, orbiting 100 miles above the Earth in Gemini 5 talked with aquanaut M. Scott Carpenter in Sealab II, 205 feet below the surface of the Pacific Ocean. It happened to be Cooper's wedding anniversary.

November 16, 1965 – The Soviet Union launched the Venera 3 space probe toward Venus. It would become the first spacecraft to reach the surface of another planet, though it failed to return data.

December 15, 1965 - Gemini 6A, crewed by Wally Schirra and Thomas Stafford launched from Cape Kennedy, Florida. Four orbits later, it achieved the first space rendezvous, with Gemini 7.

1966

February 3, 1966 - The Soviet Luna 9 spacecraft landed safely on the moon in the Ocean of Storms. It was the first lunar soft landing and first transmission of photographic data from the Moon to Earth.

March 3, 1966- The BBC announces plans to begin broadcasting television programmes in colour the following year, becoming the first European broadcaster to provide regular colour broadcasts.

April 3, 1966 - Luna 10 became the first spacecraft to enter lunar orbit. It completed its first orbit in two hours 58 minutes.

August 7, 1966 - Jimmy Wales was born in Huntsville, Alabama. He grew up to co-found Wikipedia.

August 23, 1966 – Lunar Orbiter 1 takes the first photograph of Earth from orbit around the Moon.

September 8, 1966 - The TV show Star Trek made its network television debut with the episode "The Man Trap". Star Trek would have a profound influence on future technology thought and design.

1967

January 27, 1967 - The first US astronauts died in the line of duty. Gus Grissom, Ed White and Roger Chaffee were killed on the launch pad when a flash fire engulfed their command module during testing for the first Apollo-Saturn mission.

April 17, 1967 - The Surveyor 3 spacecraft was successfully launched from Cape Kennedy, Florida on its mission to the Moon. It was the first to carry a surface soil sampling scoop.

May 9, 1967 - The National Center for Atmospheric Research dedicated its new building in Boulder Colorado. Funded by a $100,000 grant from the Max C. Fleishmann Foundation and designed by renowned architect I.M. Pei., the center pioneered investigation of weather patterns and other atmospheric phenomena.

June 25, 1967 - The very first Consumer Electronics Show opened in New York occupying the Americana and New York Hilton Hotels. It was devoted to home entertainment electronics and featured such advances as portable color TVs and video tape recorders.

June 27, 1967 – The world's first ATM was installed at a Barclays Bank branch in Enfield Town, England, United Kingdom.

August 1, 1967 - The US Navy recalled Captain Grace Murray Hopper to active duty to help develop the programming language COBOL.

October 10, 1967 - The Outer Space Treaty came into force, banning nuclear weapons or any other weapons of mass destruction being placed in Earth orbit or on any other celestial body. It also prevents any state from claiming a sovereignty over any celestial resource like the Moon.

November 9, 1967 - NASA launched a Saturn V rocket carrying Apollo 4, a test craft launched from Cape Kennedy. It was the first launch in the Apollo program and the first time using the Launch Control Center at Kennedy Space Center.

November 19, 1967 – Hong Kong TV, the first free over the air commercial television station in Hong Kong was established. Today it is known as TVB.

December 11, 1967 - The Concorde, a joint British-French venture and the world's first supersonic airliner, was unveiled in Toulouse, France. Bigger news than the speed of the jet was the announcement that it was finally agreed that the British and French planes would both be spelled with an "e" at the end.

1968

January 22, 1968 - Apollo 5 lifted off carrying the first Lunar module into space.

February 16, 1968 - The first-ever 911 call was placed by Alabama Speaker of the House Rankin Fite from Haleyville City Hall to US Rep. Tom Bevill at the city's police station.

July 18, 1968 - Robert Noyce, Andy Grove and Gordon Moore incorporated Moore and Noyce electronics, swiftly renamed at Noyce's daughter's suggestion to Integrated Electronics Corporation, or Intel for short.

October 22, 1968 - The US bounced back from tragedy with the first manned mission to space, Apollo 7 safely splashing down in the Atlantic Ocean after orbiting the Earth 163 times.

November 1, 1968 - The MPAA and 2 other industry organisations introduced the voluntary ratings system. G meant good for all ages, M meant mature audiences, R was restricted and X... well you know what X means. It would serve as a model for future voluntary systems like that used by the video game industry.

December 9, 1968 - Computer scientist Douglas Engelbart gave a legendary product demonstration of MLS that would become known as "the mother of all demos." Among other things it introduced the computer mouse, video conferencing, teleconferencing, hypertext, word processing, hypermedia, object addressing and dynamic file linking, bootstrapping, and a collaborative real-time editor.

December 21, 1968 – Apollo 8, the first manned mission to the moon, launched from the Kennedy Space Center in Florida. The crew performed the first ever manned Trans Lunar Injection and became the first humans to leave Earth's gravity. The Apollo Guidance Computer was the first computer to use integrated circuit logic.

December 22, 1968 - At 3:01 PM Eastern time, Apollo 8 transmitted the first US live telecast from a manned spacecraft in outer space.

December 23, 1968 - Apollo 8 astronauts Frank Borman, James A. Lovell, Jr., and William A. Anders made the lunar-orbit-insertion maneuver on their way to becoming the first humans to orbit the Moon.

December 24, 1968: The crew of Apollo 8 delivered a live, televised Christmas Eve broadcast after becoming the first humans to orbit another space body.

December 27, 1968 - Apollo 8 splashed down in the Pacific Ocean, ending the first manned orbit of the Moon.

1969

January 16, 1969 - The Soyuz 4 and Soyuz 5 spacecraft successfully docked in orbit. Yevgeny Khrunov moved from Soyuz-5 to Soyuz-4 and Alexei Yeliseyev went from 4 to 5, marking the first time spacefarers went up in one craft and returned to Earth in another.

February 9, 1969 - The Boeing 747 jumbo jet took flight for the first time. It was the first wide-body plane ever produced.

March 13, 1969 – Apollo 9 returned safely to Earth after orbital testing of the first crewed Lunar Module.

April 7, 1969 – The first Request For Comment, RFC 1 put together by Steve Crocker was distributed on the newly operational ARPANET. RFCs describe methods, behaviors, research, or innovations applicable to the working of the Internet.

May 18, 1969 - Apollo 10 launched, completing all the stages of a moon-landing mission without landing on the Moon. Astronauts Eugene Cernan and Thomas Stafford descended in the Lunar Module to within 15KM of the lunar surface.

May 26, 1969 - Apollo 10 returned to Earth after a successful eight-day test of all the components needed for the manned moon landing.

July 16, 1969 - Neil A. Armstrong, Edwin E. Aldrin, Jr., and Michael Collins, blasted off from Cape Kennedy on Apollo 11, the first manned mission to the surface of the moon.

July 20, 1969 - In a first for humans, Neil Armstrong and Edwin A. "Buzz" Aldrin Jr. Successfully landed the Lunar Module "Eagle" on the surface of the Moon as part of the Apollo 11 mission and became the first humans to ever set foot on earth's satellite.

July 24, 1969 - Apollo 11 arrived safely in the Pacific Ocean, ending the first manned mission to land on the Moon.

August 30, 1969 - BBN delivered the first Interface Message Processor (IMP) to the Network Measurements Center at UCLA. It was built from a Honeywell DDP 516 computer with 12K of memory, and would be used in October to make the first Internet connection with Stanford. Graduate students Vinton Cerf, Steve Crocker, Bill Naylor, Jon Postel, and Mike Wingfield were charged with installation.

October 5, 1969 - The first episode of Monty Python's Flying Circus aired on the BBC. The show created the Spam sketch that would eventually inspire the slang term for unsolicited email.

October 29, 1969 - The first ever computer-to-computer link was established on the ARPANET. UCLA student Charley Kline sent the characters l and o to Stanford the connection crashed before he could finish sending 'login' The Internet has been crashy right from the start.

November 21, 1969 - The first permanent ARPANET link was established between the Interface Message Processor or IMP at UCLA and the IMP at the Stanford Research Institute.

November 24, 1969 - The Apollo 12 command module with its all-Navy crew splashed down safely in the Pacific Ocean, ending the second manned mission to the Moon. Credit goes to the USS Hornet for its second flawless recovery effort.

THE SEVENTIES

1970

February 11, 1970 - With the launch of Osumi 5, Japan became the fourth country (after the US, USSR and France) to place a satellite into orbit.

April 11, 1970 – Apollo 13 launched from Kennedy Space Center. The second-stage inboard engine shut down early but orbital insertion was achieved. However the problems were not over.

April 13, 1970 – The crew of Apollo 13 heard a sharp bang and vibration followed by a warning light. Jack Swigert radioed back the famous words "Houston, we've had a problem here."

April 17, 1970 – The Apollo 13 spacecraft returned safely to Earth after a frightening malfunction caused the team to abort landing on the Moon and scramble to keep themselves alive.

April 24, 1970 – The Chang Zheng-1 rocket launched the first Chinese satellite, the Dong Fang Hong-1.

April 26, 1970 – The Convention Establishing the World Intellectual Property Organization entered into force.

August 20, 1970 - John Carmack was born in Shawnee Mission, Kansas. He would grow up to co-found id software and bring the world Doom, Wolfenstein and Quake.

November 12, 1970 - The Oregon Highway Divisions made an ill-advised attempt to destroy a dead whale by blowing it up with explosives. The results, documented by local news, eventually became Internet gold as the "exploding whale" video.

November 17, 1970 – The Soviet Union landed Lunokhod 1 on Mare Imbrium on the Moon. It was the first roving remote-controlled robot to land on another world.

1971

January 31, 1971 - Astronauts Alan Shepard, Stuart Roosa, and Edgar Mitchell lifted off on the Apollo 14 mission to the Fra Mauro Highlands on the Moon.

February 6, 1971 - Apollo 14's Lunar Module lifted off from the moon, returning astronauts Alan Shepard and Edgar Mitchell to the Command Module. Shepard had made extra history by becoming the first human to hit a golf ball on the moon.

February 8, 1971 - 10 years after the SEC suggested automation could solve the problem of fragmentation in over-the-counter stocks, the National Association of Securities Dealers Automated Quotations or NASDAQ index began trading, the world's first electronic stock market.

April 16, 1971 - Abhay Bhushan proposed FTP (File Transfer Protocol) in RFC 114.

May 28, 1971 - The USSR launched Mars 3. It would arrive at Mars in December and its lander would become the first spacecraft to land successfully on Mars.

July 9, 1971 - Marc Andreessen was born in Cedar Falls, Iowa. He would grow up to develop the Netscape browser, which powered the explosion of the Web in the late 1990s.

July 30, 1971 - The Apollo 15 mission landed the first lunar rover onto the moon.

July 31, 1971 - Apollo 15 astronauts David Scott and James Irwin became the first humans to take a drive on the Moon in the lunar rover.

November 14, 1971 - The American space probe Mariner 9 began orbiting Mars becoming the first spacecraft to successfully orbit another planet.

November 15, 1971 - Intel released the world's first commercial single-chip microprocessor, the 4004 with an advertisement in Electronic News, though the chip may have been delivered earlier in the spring to some customers. It was the first complete CPU on one chip.

November 27, 1971 – The Soviet Union's Mars 2 orbiter released its descent module, which probably had too steep an angle of entry, and malfunctioned and crashed. But hey, it was still the first manmade object to reach the surface of Mars.

1972

January 5, 1972 - President Richard M. Nixon announced that NASA would develop a space shuttle system, emphasizing its reliability, reusability and low cost.

February 1, 1972 - The first scientific handheld calculator, the famous HP-35, was introduced for $395 by Hewlett-Packard. It was the first handheld calculator to perform logarithmic and trigonometric functions with one keystroke.

June 27, 1972 - Nolan Bushnell and Ted Dabny filed incorporation papers for Atari, Inc. and got ready to release its first product, a game called Pong.

October 3, 1972 - The first USA/Japan Computer Conference was held in Tokyo.

November 29, 1972 - Nolan Bushnell installed a coin-operated arcade game at Andy Capp's tavern in Sunnyvale, California. It only played Allan Alcorn's Pong. Within 4 months there were 10,000 across the country.

December 7, 1972 - The last Apollo moon mission, Apollo 17 was launched. The crew took the famous Blue Marble picture that now graces desktop background everywhere.

December 11, 1972 - Apollo 17 became the sixth and last Apollo mission to land on the Moon.

December 14, 1972 - Eugene Cernan ended a 7 hour and 15 minute EVA, climbed back aboard the Apollo 17 Lunar Module and became the last person to walk on the moon.

December 19, 1972 – Apollo 17, the last manned lunar flight crewed by Eugene Cernan, Ronald Evans and Harrison Schmitt, returned to Earth.

1973

January 8, 1973 - Less than a month after Apollo 17, the last manned Moon mission, the USSR launched space mission Luna 21 carrying lunar rover Lunakhod 2.

January 14, 1973 - Elvis Presley's concert, "Aloha from Hawaii" was broadcast live via satellite, and set a record as the most watched broadcast by an individual entertainer in television history.

February 12, 1973 - Along Interstate 71 in Ohio, the first metric distance road signs to be erected in the US were put in place. They informed of the distance between Columbus and Cleveland and Columbus and Cincinnati.

March 26, 1973 - Larry Page was born in East Lansing, Michigan. He would go on to help invent and co-found Google.

April 2, 1973 - Lexis launched Computerized Legal Searching. It was limited to searching the full text of cases in Ohio and New York.

April 3, 1973 – Martin Cooper, general manager of Motorola's Communications Systems Division made the first handheld portable phone call from a New York City street to Joel S. Engel at rival Bell Labs. Presumably he gloated at least a little.

April 6, 1973 – NASA launched the Pioneer 11 spacecraft, the second mission to investigate Jupiter and the outer solar system and the first to explore the planet Saturn and its main rings.

May 14, 1973 – The United States launched Skylab, the country's first space station as part of the Apollo space program.

May 22, 1973 - Bob Metcalfe of the Xerox Palo Alto Research Center wrote a memo on an IBM Selectric typewriter, outlining how to connect personal computers to a shared printer. Metcalfe says "If Ethernet was invented in any one memo, by any one person, or on any one day, this was it."

July 13, 1973 - Alexander Butterfield revealed the existence of the Nixon tapes to the US Senate committee investigating the Watergate break-in. Always make back-ups, unless you want to remain President.

August 21, 1973 - Sergey Brin was born in Moscow. His family immigrated to the US in 1979. He would grow up to co-develop a search engine with Larry Page and co-found Google.

October 19, 1973 - The Atanasoff-Berry Computer finally got its due. US Federal Judge Earl R. Larson signed his decision that the ENIAC patent was invalid and named Atanasoff the inventor of the electronic digital computer. But ENIAC still incorrectly gets the credit from many to this day.

November 3, 1973 - NASA launched Mariner 10 towards Mercury. It would become the first space probe to reach the planet.

December 12, 1973 - Founder of LinkExchange, CEO of Zappos, and promoter of customer-centric business, Tony Hsieh was born.

1974

February 5, 1974 - The US space probe Mariner 10 returned the first close-up images of Venus and became the first spacecraft to use a gravity assist from one planet to help it reach another.

March 29, 1974 – NASA's Mariner 10 became the first space probe to cross the orbit of Mercury about 704 km from the surface.

April 13, 1974 – Western Union, NASA and Hughes Aircraft, teamed up to launch the United States' first commercial geosynchronous communications satellite, Westar 1. The system relayed data, voice, video, and fax transmissions to the continental US, Hawaii, Puerto Rico, Alaska, and the Virgin islands.

June 26, 1974 - At 8:01 AM, a supermarket cashier scanned a 10-pack of Wrigley's chewing gum across a bar-code scanner at Marsh Supermarket in Troy, Ohio. It was the first product ever checked out by Universal Product Code.

December 19, 1974 - The Altair 8800 microcomputer from Micro Instrumentation Telemetry Systems in Albuquerque, New Mexico went on sale. For $439 you got everything you needed to build a computer in one kit boasting 256 bytes of memory!

1975

January 30, 1975 - Hungarian Interior Design instructor Erno Rubik filed for a patent on his twisty toy cubes. The patent worked out for him. Erno Rubik became the first self-made millionaire from the Communist bloc.

March 5, 1975 - The Homebrew Computer Club, held its first meeting in the garage of Gordon French in Menlo Park, California. 32 people showed up for the first meeting. John Draper, Steve Wozniak and Steve Jobs were some of the more famous members of the club.

April 4, 1975 - Bill Gates and Paul Allen formed a partnership in Albuquerque New Mexico. The venture was later named Micro-soft.

June 7, 1975 - Sony introduced the Betamax video recorder for sale. It would lose the format war to VHS but find a niche in broadcast production.

June 29, 1975 - Steve Wozniak built the first prototype of the Apple I, the first computer to show letters on the screen as you typed them.

July 21, 1975 - Xerox announced its withdrawal from computer mainframe manufacturing. The company did indicate it would continue activities in other computer-related businesses like computer disk drives, serial printers, and apparently giving away secrets to companies like Apple and Microsoft.

October 20, 1975 - Atari filed for a patent on the sit-down "cockpit" arcade cabinet, literally putting you inside the game. The game Hi-Way with the slogan "Hi Way — All It Needs Is Wheels", was the first Atari game to use the cabinet. It was a first-person driver in which you had to dodge cars and... well... drive.

October 22, 1975 - The Soviet unmanned space mission Venera 9 landed on Venus. Pics or it didn't happen you say? Well Venera 9 was the first spacecraft to return an image from the surface of another planet.

1976

January 13, 1976 - Raymond Kurzweil and the leaders of the National Federation of the Blind announced the Kurzweil Reading Machine, the first text-to-speech machine. Walter Cronkite used it to deliver his signature sign-off, "And that's the way it was, January 13, 1976."

March 4, 1976 - The first Freon-cooled Cray-1 supercomputer was shipped to Los Alamos Laboratories, in New Mexico at a cost of $19,000,000.

March 26, 1976 – Queen Elizabeth II sent the first royal email, from the Royal Signals and Radar Establishment in Malvern as a part of a demonstration of networking technology.

April 1, 1976 - Steve Jobs, Steve Wozniak, and Ronald Wayne decided to change their garage project into a company and formed Apple Computer. It would be incorporated the following January.

April 16, 1976 - The Helios-B deep-space probe made (what was then) the closest controlled approach to the Sun at 43 million km or within 0.3 AU.

July 11, 1976 - K&E produced its last slide rule, which it presented to the Smithsonian Institution. While slide rules continue to be made, especially for marine and aviation uses, K&E had been the dominant manufacturer, and this signaled the end of an era, and the rise of the electronic calculator.

July 20, 1976 - In a first for robots, the Viking 1 lander successfully set down on on Mars in the Chryse Planitia and performed its mission.

July 31, 1976 - NASA issued a press release describing one photo taken by Viking 1 on Mars as resembling "a human head." Conspiracy theories about the face on Mars still run today, though close-up pictures from the Mars Express mission have debunked most of them.

September 3, 1976 - Viking 2 landed on Mars and began taking high-resolution pictures, measuring the atmosphere and surface, and look for evidence of life.

November 25, 1976 - The Project Viking landers passed through superior conjunction at Mars, enabling scientists to begin an experiment that used the landers as transponders. The data collected confirmed the Shapiro Delay, becoming one of the best confirmations of General Relativity we have seen.

1977

January 3, 1977 - Steve Jobs and Steve Wozniak incorporated Apple Computer Company. Ron Wayne famously backed out selling his shares back for $800. Ouch.

February 18, 1977 - The Enterprise space shuttle orbiter prototype made the first of five "captive-inactive" flight tests, testing structural integrity and performance handling, while attached to the top of a 747 jumbo jet.

April 15, 1977 - The first West Coast Computer Faire took place in Palo Alto. The star of the show would turn out to be the Apple II. The computer featured a built-in keyboard, 16 kilobytes of memory, BASIC, and eight expansion slots all for $1,300.

June 4, 1977 - JVC introduced the open standard for the VHS videocassette in North America at a press conference before the Consumer Electronics Show in Chicago.

June 5, 1977 – The Apple II went on sale. It had a bus speed of 1 MHz and 64 KB of memory.

June 10, 1977 – A few days after going on sale, Apple began shipping the Apple II for the first time.

June 16, 1977 - Software Development Laboratories was incorporated in Redwood Shores, California, by Larry Ellison, Bob Miner and Ed Oates. They later came up with the catchier name, Oracle.

July 13, 1977 - Lightning struck a Consolidated Edison substation on the Hudson River, tripping two circuit breakers and setting off a chain of events that resulted in a massive power failure. The entire city of New York was blacked out.

August 3, 1977 - Tandy Corp of Texas held a New York press conference to announce that it will manufacture the TRS-80.

August 12, 1977 - The space shuttle Enterprise carried out its first free flight test, when the orbiter was released from the back of a 747 in flight.

September 5, 1977 – NASA launched Voyager 1 after a brief delay. Although it was launched 16 days after Voyager 2, it's faster flight path would take it past Jupiter first.

October 14, 1977 - The Atari 2600 went on sale in North America.

October 25, 1977 - VAX/VMS was born. At a shareholder meeting, DEC the Digital Equipment Corporation released VMS v1.0 the first version of what we later be called OpenVMS, along with the VAX 11/780 architecture which increased the PDP-11 address space.

November 18, 1977 - A startup called Microsoft, fresh off developing its own version of FORTRAN, wins the right in arbitration to license its version of BASIC, previously licensed exclusively through MITS, makers of the Altair.

December 1, 1977 - Time Warner launched QUBE in Columbus, Ohio, the first two-way interactive cable system. One of its channels called "The Pinwheel" would later be relaunched as Nickelodeon.

December 13, 1977 - Robert Metcalfe et. al were awarded a patent for "Multipoint data communication system with collision detection" AKA ethernet.

December 13, 1977 - Young Bill Gates was arrested for traffic violation in Albuquerque, New Mexico, leading to one of the most famous mugshots ever.

1978

February 16, 1978 - After a particularly harsh January gave them plenty of time for programming, Ward Christensen and Randy Suess completed the Computerized Bulletin Board System (CBBS) in Chicago. It was the first BBS.

March 8, 1978 – The first radio episode of The Hitchhiker's Guide to the Galaxy, by Douglas Adams, is transmitted on BBC Radio 4. Some credit Adams with accidentally predicting the PDA and smartphone.

April 2, 1978 - The patent expired on Swiss inventor George de Mestral's invention of a hook and loop fastener he called Velcro. Soon children everywhere no longer had to learn to tie shoes quite so early in life.

May 3, 1978 - Digital Equipment Corporation (DEC) sent the first unsolicited mass commercial email to 600 west coast ARPANET users. The message informed users of DEC's new computer and operating system with ARPANET support, the DECSYSTEM-2020 and TOPS-20.

June 11, 1978 - Texas Instruments introduced the Speak & Spell, the first electronic duplication of the human vocal tract on a single chip of silicon. It used linear predictive coding to make a mathematical model of the human vocal tract and predict a speech sample.

1979

January 2, 1979 - Dan Bricklin and Bob Frankston incorporated Software Arts for the purpose of developing VisiCalc, the world's first spreadsheet program.

January 25, 1979 - Robert Williams was killed on the job in a Flat Rock, Michigan, casting plant, becoming the first recorded human death by robot.

March 8, 1979 - Philips publicly demonstrated a prototype of an optical digital audio disc at a press conference called "Philips Introduces Compact Disc."

March 25, 1979 – The first fully functional space shuttle orbiter, Columbia, was delivered to the John F. Kennedy Space Center in preparation for its first launch.

March 28, 1979- A combination of equipment malfunction and human error caused a partial reactor meltdown at the Three Mile Island nuclear power plant near Middletown, Pennsylvania. While no injuries or deaths have been attributed to the accident, it changed US nuclear attitudes significantly.

May 11, 1979 - Daniel Bricklin and Robert Frankston gave the first demonstration of VisiCalc, the program that made the Apple II popular with businesses.

July 1, 1979 - Sony introduced the Sony Walkman TPS-L2. It weighed 14 ounces, was blue and silver, and had a second earphone jack. It was originally marketed in the US as the Sound-About and in the UK as the Stowaway.

July 9, 1979 - Voyager 2 made its closest approach to Jupiter, coming within 570,000 kilometers of the planet.

July 11, 1979 - The US space station Skylab returned to Earth scattering debris over the Indian ocean and Western Australia.

September 7, 1979 – The Entertainment and Sports Programming Network, ESPN, makes its debut. It will become one of the main drivers of cable TV adoption and one of the main factors in the switch to Internet television.

September 24, 1979 - CompuServe began offering a consumer version of its dial-up online information service called MicroNET. The name would later be changed to CompuServe and offer public email among other online services.

October 12, 1979 - The Hitchhiker's Guide to the Galaxy was first published unleashing in book form the world of Vogon Poetry, essential towel behavior, and the BabelFish.

November 9, 1979 - The NORAD computers detected a massive Soviet Nuclear Strike. Thankfully raw data from satellites were reviewed along with early warning radar, proving it was a false alarm. A technician had loaded a test tape but failed to switch the system status to "test". Oops!

THE EIGHTIES

1980

April 2, 1980 - Microsoft Corporation announced their first hardware product the Z80 SoftCard for Apple. It was a microprocessor on a printed circuit board that plugged into the Apple II and sold for $349.00.

May 22, 1980 – Namco released an arcade game called Puck-Man. When it was released in the US in October the name was altered to Pac-Man.

June 7, 1980 - The first US solar power plant was dedicated at the Natural Bridge National Monument, Utah.

September 5, 1980 - The last IBM 7030, AKA STRETCH, mainframe computer was decommissioned at Brigham Young University.

September 30, 1980 – Xerox published the Version 1.0 specifications for Ethernet in conjunction with Intel and Digital Equipment Corporation.

November 6, 1980 - Microsoft signed a contract with IBM to create an operating system for the new IBM PC. Bill Gates and Steve Ballmer had convinced the heritage tech company that they were not only talented enough to pull it off, but that they should be paid a royalty on the software.

December 12, 1980 - Apple's stock was initially offered for sale. Regulators in Massachusetts prohibited individual investors in the state from buying the stock, as it was deemed too risky.

1981

January 20, 1981 - The inauguration of US President Ronald Reagan is the world's first broadcast to feature live teletext subtitles for the hearing impaired.

January 21, 1981 - The first DeLorean DMC-12 sports car rolled off the production line in Dunmurry, Northern Ireland. This one made no use of gigawatts in any way.

March 5, 1981 - The ZX81 is launched by Sinclair Research in Britain for £69.95 and would go on to sell over 1.5 million units around the world. It was much more successful than it's predecessor the ZX80.

March 22, 1981 - RCA first SelectaVision VideoDisc the SFT100W went on sale. The machine used Capacitance Electronic Discs to fit a couple hours of video programming on a 12-inch vinyl disc that sold for around $15.

April 3, 1981 - Adam Osborne unveiled the Osborne 1 at the West Coast Computer Faire in San Francisco. It cost $1,795 at retail.

April 12, 1981 – Commander John Young and Pilot Robert Crippen crewed the first launch of a Space Shuttle, The Columbia on the STS-1 mission. During the mission they used an HP-41 calculator to calculate the exact angle at which they needed to re-enter the Earth's atmosphere.

April 24, 1981 - Apple introduced the portable Apple IIc. The machine came with 128 kilobytes of RAM and a 5 1/4 inch floppy disk drive.

April 27, 1981 - The first mouse integrated with a personal computer made its appearance with the Xerox Star workstation.

May 26, 1981 - Satya Pal Asija received the first US patent for a computer software program. It was called Swift-answer. The patent took seven years to issue, and the validity of software patents has been debated ever since

June 21, 1981 - IBM retired the last of its "STRETCH" mainframes. These mainframes were part of the 7000 series that made up the company's first transistorized computers.

June 25, 1981 - After six years as a company, Microsoft incorporated in the state of Washington.

July 7, 1981 - The first solar-powered aircraft, Solar Challenger, flew 163 miles from Corneille-en-Verin Airport north of Paris across the English Channel to Manston Royal Air Force Base south of London, staying aloft 5 hours and 23 minutes.

July 27, 1981, Microsoft bought the rights for QDOS (Quick and Dirty Operating System) from Seattle Computer Products for $25,000.

August 1, 1981 - MTV began broadcasting in the United States, playing The Buggles Video Kileld the Radio Star, and changing how we view music forever.

August 12, 1981 - IBM introduced the model 5150 personal computer. It had a 4.77 MHz Intel 8088 microprocessor and used Microsoft's MS-DOS operating system.

August 25, 1981 - Voyager 2 made its closest approach to Saturn. 8 years later on the same day in 1989, Voyager 2 would make its closest approach to Neptune.

September 7, 1981 - The first large parallel processing computer, ILLIAC IV, ends its nearly decade-long life at the University of Illinois.

November 19, 1981 - Philippine President Ferdinand Marcos banned video games, citing such insidious examples as Space Invaders and Asteroids that were a "destructive social enemy, the electrical bandit".

1982

January 8, 1982 - The United States vs. AT&T settlement was finalized with AT&T agreeing to divest itself of local exchanges in exchange for being allowed to start AT&T Computer Systems. Like Voltron, the behemoth would eventually reassemble.

March 5, 1982 - Four days after it's twin, the second of two Soviet probes to Venus, the Venera 14 landed on the planet. Venera 13 and 14 would continue to send data until 1983.

April 23, 1982 - Sinclair launched the ZX Spectrum launched. The Spectrum popularised home computing in the UK.

June 28, 1982 - Microsoft unveiled a new corporate logo with the famous "blibbet" of horizontal lines in the first O. New packaging, and a comprehensive set of retail dealer support materials came along with the blibbet.

July 9, 1982 - Disney released the movie Tron, which used the most extensive computer-generated graphics and special effects to that time.

August 17, 1982 - Royal Philips Electronics manufactured the world's first Compact Disc (not counting test pressings) at a Polygram factory in Langenhagen, just outside of Hanover, Germany. The CD was "The Visitors" by Abba.

August 30, 1982 - A copyright was issued to 16-year-old V.A. Shiva Ayyadurai for a computer program he called "EMAIL," short for "electronic mail." While Ayyadurai may not be considered the inventor of email he definitely deserves credit for establishing the name.

September 19, 1982 - In a posting made at 11:44 AM, Professor Scott Fahlman first proposed using the characters :-) to indicate jokes on a computer-science department bulletin board at Carnegie Mellon University. In the same post he suggested :-(.

October 1, 1982 - Sony started selling the first CD players to the public, the CDP-101 for 168,000 yen (that's about $730 US). At the time you could get Billy Joe's album 52nd street on CD.... and soon many more.

November 13, 1982 - 15-year-old Scott Safran of Cherry Hill New Jersey set the world record score on Asteroids. His record stood for 27 years, the longest-running high score in videogame history.

December 2, 1982 - A Seattle dentist named Barney Clark, deemed too sick for a heart transplant, became the first human recipient of a permanent artificial heart, the Jarvik 7. He survived for 112 days.

December 26, 1982 - Time's January 3rd issue arrived on newsstands with the computer on the cover as Machine of the Year. It was the first non-human to gain the honor since the Man of the Year concept started in 1927 with Charles Lindbergh.

1983

January 1, 1983 - A new Internet and Transmission Control Protocol (Yep called IP/TCP by some at the time, weird I know) went into effect on the ARPANet, replacing the Network Control Protocol. The result was a new ARPA Internet combining ARPA hosts of the time new systems.

January 19, 1983 - Apple released the Lisa, the second commercial computer with a graphical user interface (after the Xerox Star). It only cost $9,995 too!

January 26, 1983 - Lotus begins selling its spreadsheet application for Microsoft DOS, called 1-2-3. It would quickly become the most popular spreadsheet software but not make the transition to Windows well and fall behind Excel permanently.

March 2, 1983 – CBS Records launches the first major compact disc music marketing campaign, with 16 titles. CDs had gone on sale to the public the previous October in Japan.

May 2, 1983 - Microsoft Corp. announced their two-button Microsoft Mouse built for IBM computers and meant to be used with the new Microsoft Word Processor. Only 5,000 sold of the 10,000 made.

June 13, 1983 - Pioneer 10 became the first human-made object to pass outside Pluto's orbit and leave the central solar system.

June 23, 1983 - Paul Mockapetris and Jon Postel ran the first successful test of the automated, distributed Domain Name System at the University of Southern California School of Engineering's Information Sciences.

July 15, 1983 - Nintendo released the Family Computer or Famicom, along with Donkey Kong, Donkey Kong Jr. and Popeye cartridges. It would later be released in the US under as the Nintendo Entertainment System, or NES.

July 19, 1983 - On July 19, 1983, Michael W. Vannier and his co-workers J. Marsh and J. Warren published the first three-dimensional reconstruction of single computed tomography (CT) slices of the human head.

September 13, 1983 - Osborne Computer declared bankruptcy in Oakland, CA, federal bankruptcy court, listing assets of $40 million, liabilities of $45 million, and 600 creditors. Two years earlier, Osborne produced the first portable computer, the 24-pound Osborne I.

September 20, 1983 - A patent for the RSA Algorithm for public-key cryptography was awarded. RSA stands for Ron Rivest, Adi Shamir and Leonard Adleman, who first publicly described it in 1977.

September 26, 1983 - 17-year-old Neal Patrick, of the hacking group 414s testified before the US House of Representatives about computer break-ins and how they might be stopped.

September 27, 1983 – Richard Stallman announced the GNU project, which aimed at the time to develop a free Unix-like operating system.

October 13, 1983 - Bob Barnett, president of Ameritech Mobile communications, called Alexander Graham Bell's nephew from Chicago's

Soldier Field using a Motorola DynaTAC handset. It marked the launch of the first cellular telephone network in the US.

October 21, 1983 - The seventeenth General Conference on Weights and Measures ruled the meter would be defined as the distance light travels in a vacuum in 1/299,792,458 of a second, simplifying it from the previous definition of 1,650,763.73 wavelengths of the orange-red emission line in the electromagnetic spectrum of the krypton-86 atom in a vacuum.

November 10, 1983 - Fred Cohen demonstrated a way to insert code into a Unix command in order to gain control of systems. His academic adviser, Len Adelman (the A in RSA) compares the self-replicating code to a virus. It wasn't the first code of its kind, but it's the one that inspired the name.

November 10, 1983 - At the plaza hotel in New York, Bill Gates announced Windows. It originally was called Interface Manager until Rowland Hanson convinced Gates to change the name. It would take two years before Microsoft would put it on sale.

November 13, 1983 - The MIT TX-0, an experimental transistorized computer, was brought back to life for the last time at The Computer Museum in Marlboro, Massachusetts.

1984

January 5, 1984 - Richard Stallman began working on the GNU Operating system, a free UNIX-like OS. GNU/Linux is seen as the most successful outgrowth of that project.

January 22, 1984 - Apple aired the famous "1984" commercial for the Apple Macintosh, directed by Ridley Scott.

January 24, 1984 - The original Macintosh was introduced becoming the first commercially successful personal computer to feature a mouse and a graphical user interface rather than a command line interface.

February 7, 1984 - Challenger astronauts Bruce McCandless II and Robert L. Stewart made the first untethered spacewalks.

May 14, 1984 - According to his Facebook profile Mark Zuckerberg was born in Dobbs Ferry, New York. He would grow up to found Facebook.

June 6, 1984 – Tetris, one of the best-selling video games of all-time, is released. It was invented by a Soviet programmer, Alexei Pazhitnov and popularized by Hank Rogers who bought the rights and distributed it.

August 26, 1984 - Miss Manners confronted her first computer issue. The columnist responded to a reader's concern about typing personal correspondence on a personal computer.

October 20, 1984 - The Monterey Bay Aquarium opened in Monterey, California. It not only provided a world-class place to learn about sea life, but inspired millions of screensavers and wallpaper images.

November 20, 1984 - The SETI Institute, the Search for Extraterrestrial Intelligence was founded by Thomas Pierson (CEO), and Dr. Jill Tarter. No luck so far, but they keep looking.

1985

January 1, 1985 - The Nordic Research Network NORDUnet registered the first domain name NORDU.NET.

February 1, 1985 - Shortly after its founding the November before, the Search for Extraterrestrial Intelligence kicked off. SETI Institute began operations.

March 11, 1985 - The Southern New England Telephone Company turned on ConnNet, the nation's first local, public packet-switching network. Customers could access CompuServ, NewsNet and other services at a blistering 4,800 to 56,000 bits per second. The service's X.25 protocol went obsolete in the 1990s with the popularity of the Internet Protocol.

March 15, 1985 - Symbolics, a Massachusetts computer company, registered the Internet's first domain name, symbolics.com. An investment company who uses it as a marketing device now owns the domain. The remains of the original Symbolics Company survives in altered form at symbolics-dks.com.

July 23, 1985 - Commodore introduced the Amiga personal computer at the Vivian Beaumont Theater in New York's Lincoln Center. Amiga cost $1,295 and shipped with a base configuration of 256K of RAM.

September 11, 1985 - ISEE-3, renamed the International Cometary Explorer (ICE) flew through the gas tail of comet P/Giacobini-Zinner.

September 12, 1985 - Steve Jobs announced to the Apple board that he would resign. Jobs said, "I've been thinking a lot, and it's time for me to get on with my life. It's obvious that I've got to do something. I'm 30 years old."

September 13, 1985 - Nintendo released Super Mario Brothers in Japan. It became the best selling video game for 20 years until it was surpassed by Wii Sports.

September 16, 1985 - Steve Jobs spent his last day as an employee of Apple after submitting his resignation to the board.

October 3, 1985 - STS-51J lifted off Sending the Space Shuttle Atlantis on its maiden flight. It was the fourth shuttle created and eventually became the last shuttle to fly in July 2011.

October 4, 1985 - Richard Stallman started a non-profit corporation called the Free Software Foundation, dedicated to promoting the universal freedom to create, distribute and modify computer software. The FSF among other things enforces the copyleft requirements of the GNU General Public License often referred to as the GPL.

October 13, 1985 - The first observation of a proton-antiproton collision was made by the Collider Detector at the Fermi National Accelerator Laboratory in Batavia, Illinois.

October 14, 1985 - The first official reference guide for the C++ programming language was published. The language's creator, Bjarne Stroustrup, wrote it.

October 18, 1985 - Nintendo introduced the Nintendo Entertainment System aka the NES at FAO Schwarz in New York. A little game called Super Mario Brothers was introduced on the same day. The NES was the North American version of the Famicom sold in Japan. It was test-marketed in New York and eventually conquered the continent, becoming an 8-bit classic.

November 20, 1985 - Microsoft finally released Version 1.0 of Windows. It was considered slightly inferior to competitors like DESQview and the Macintosh.

December 4, 1985 - The Cray X-MP/48 began operation at the San Diego Supercomputer Center. It almost doubled the speed of other machines with a parallel processing system, which ran at 420 megaflops.

1986

January 16, 1986 - The Internet Engineering Task Force (IETF) met for the first time in San Diego to supervise the design and deployment of Internet protocol.

January 19, 1986 - "Brain" became the first computer virus released into the wild. It was a boot sector virus transmitted by floppy disks. The Farooq Alvi Brothers of Lahore, Pakistan created the virus.

February 20, 1986 – A Soviet Proton launcher boosted the base block of the Mir space station into orbit.

February 21, 1986 - The Legend of Zelda, the first in the ongoing series, was released in Japan for Nintendo's Famicom console.

February 27, 1986 – The United States Senate voted to allow its debates to be televised on a trial basis. The trial was successful.

April 18, 1986 - Newspapers reported that IBM had become the first to use a megabit chip, a memory chip capable of storing 1 million bits of information, in its Model 3090.

April 26, 1986 - Design flaws made worse by human error during a safety test, led to the worst nuclear disaster yet, and a partial meltdown at the Chernobyl Nuclear Plant.

May 27, 1986 – Dragon Quest was released in Japan. It combined the full-screen map of Ultima with the battle and statistics-oriented screens of Wizardry and paved the way for RPG games.

June 9, 1986 - The Pittsburgh Supercomputer Center opened to support the National Science Foundation's NSFNET, which linked five supercomputer centers. NSFNET would eventually allow commercial uses and transition to the open Internet.

September 22, 1986 - In NEC Corp. Vs. Intel Corp., the US District Court for the Northern District of California ruled that microprograms are copyrightable literary works. And so all the trouble began.

December 23, 1986, - Dick Rutan and Jeana Yeager touched down at Edwards Air Force Base in the experimental airplane Voyager, completing the first non-stop, round- the- world flight without refueling.

1987

March 18, 1987 - Thousands of physicists crowded a ballroom at the New York Hilton at the meeting of the American Physical society to hear speakers talk on high-temperature superconductivity. The session started in the evening and ran until 3:15 AM earning the nickname "Woodstock of Physics."

May 30, 1987 - North American Philips Company introduced the compact disc video (CD-V), a 12 cm (4-3/4 inch) CD-sized implementation of storage for full motion video and CD-audio.

June 15, 1987 - Compuserve's Sandy Trevor and his team, which included inventor Steve Wilhite, released a GIF version 87a. The new enhanced format allowed people to create compressed animations. "Under Construction" GIFs everywhere became possible.

October 30, 1987 - NEC started selling the first 16-bit home entertainment system, called the TurboGrafx-16 Entertainment SuperSystem or in Japan, the shorter catchier PC Engine. It was originally more popular in Japan than the FamiCom, which we North Americans call the NES.

December 9, 1987 - Microsoft released Windows 2.0, which among other improvements could run the first Windows versions of Microsoft Word and Microsoft Excel.

1988

April 21, 1988 - Tandy Corp. held a press conference in New York to announce its plans to build IBM PS/2 clones.

May 8, 1988 - A fire broke out in the main switching room of the Hinsdale Central Office of the Illinois Bell telephone company, causing a telephone service outage for more than 40,000 local phone lines. It was considered at the time to be the 'worst telecommunications disaster in US telephone industry history.'

August 4, 1988 - A computer halted an engine test in preparation for the launch of the space shuttle Discovery. The flight would be the first since the Challenger explosion in 1986.

1989

February 14, 1989 - The Department of Defense put the NAVSTAR II-1 into orbit, the first of 24 satellites that will make up the global positioning system.

July 26, 1989 - Cornell student Robert Tappan Morris became the first person indicted under the Computer Fraud and Abuse Act after releasing a worm on the Internet. Morris claimed his worm was just measuring the size of the Internet.

August 16, 1989 - A solar flare created a geomagnetic storm that caused three hard drives to fail in an otherwise fault-tolerant system at the Toronto Stock Exchange to fail. This prevented access to critical market data leading the exchange to be shut down for three hours.

August 27, 1989 - The first direct-to-home TV satellite launched from Cape Canaveral. Marco Polo I delivered the British Satellite Broadcasting service to homes in the UK.

September 19, 1989 - About 100 hospitals that used software from Shared Medical Systems saw their computers go into a loop when the date was entered. The day was 32,768 days from January 1, 1900, which caused a system overflow.

THE NINETIES

1990

April 24, 1990 - The Space Shuttle Discovery launched with the Hubble Space Telescope on board. The following day, Hubble was released into space

May 20, 1990 - The Hubble Space Telescope sends its first light image back to Earth, taken with the wide field/planetary camera.

May 22, 1990 - Microsoft released Windows 3.0. It featured big improvements in interface and multitasking. It's Control Panel feature caught the eye of Apple, which sued, and lost.

July 10, 1990 - The Electronic Frontier Foundation was formally founded, immediately coming to the aid of Steve Jackson Games, who's BBS had been seized by the Secret Service.

July 25, 1990 - Microsoft became the first software company to exceed $1 billion in sales in a single year, reporting revenues of $1.18 billion for fiscal year 1990.

August 10, 1990 - The Magellan space probe, named after Ferdinand Magellan, reached Venus, beginning its mission to map the planet's surface.

August 29, 1990 - The British Computer Misuse Act went into effect. The Act resulted from a long debate in the 1980s over failed prosecutions of hackers.

September 10, 1990 - Peter Deutsch posted to comp.archives about the Internet Archive Server called "Archie" that he, Alan Emtage, and Bill Heelan had put together. It is often considered the Internet's first search engine.

October 17, 1990 - Col Needham posted a software package to rec.arts.movies called at the time rec.arts.movies movie database that made the lists of movies on the newsgroup searchable. It would move to the web in 1992 and became known as IMDB, the Internet Movie Database.

November 12, 1990 - Tim Berners-Lee published a formal proposal for a hypertext project. The proposal refers to a "web of information nodes" and implementing "browsers" The project eventually became the World Wide Web.

December 25, 1990 - Tim Berners-Lee with help from CERN computer scientist Robert Cailliau and others— set up the first successful communication between a Web browser and server via the Internet.

1991

March 19, 1991 - US patent No. 5,000,000 was issued for a process turning garbage into fuel to microbiologist Lonnie. O. Ingram of the University of Florida. His method depended on the creation of a new species of bacterium genetically formed from two other bacteria.

April 8, 1991 - A team moved from Sun Microsystems to work in secret on its "Oak" development project, which was later renamed "Java."

July 1, 1991 - Finnish Prime Minister Harri Holkeri made the world's first GSM call over a privately operated network to Vice Mayor Kaarina Suonio in Tampere. The Prime Minister used Nokia gear on GSM's original 900MHz band.

August 6, 1991 - Tim Berners-Lee posted a short summary of his WorldWideWeb Project to alt.hypertext and pointed to a simple browser and a Web page describing the project. Thus the WWW became a publicly available service on the Internet.

August 25, 1991 - 21-year-old Finnish student Linus Torvalds wrote a newsgroup post about a free operating system he was working on. He said it was "just a hobby, won't be big and professional like gnu." His OS would eventually be called Linux.

August 28, 1991 - The crew of the Space Shuttle Atlantis sent an electronic mail message using AppleLink. The message read: "Hello Earth! Greetings from the STS-43 Crew. This is the first Applelink from space. Having a GREAT time, wish you were here!"

September 10, 1991 - Paul Lindner posted to comp.unix.misc introducing "The Internet Gopher" a distributed information service. Before the World Wide Web, Gopher was the prime way to find and share documents online.

September 17, 1991 – The first version of the Linux kernel (0.01) was posted to a Finnish FTP server in Helsinki. Originator Linus Torvalds wanted to call the OS FreaX, but the FTP admin didn't like the name and renamed it Linux.

September 26, 1991 - Eight people entered Biosphere 2, an airtight replica of the Earth's biosphere in Oracle, Arizona. They left exactly two years later in 1993. Results of the experiment are still controversial.

October 5, 1991 - Linux Kernel, version 0.02 was released, attracting a lot of attention. Author Linus Torvalds felt this version was at least usable and worth a wider release.

December 12, 1991 - Paul Kunz sets up the first website in North America. It searched particle physics literature at Stanford.

1992

January 9, 1992 - Apple CEO John Sculley coined the term Personal Digital Assistants, or PDA, and indicated Apple would get into the business of making them later that year.

March 6, 1992 – The first media-hyped computer virus reached fever pitch as the Michelangelo boot sector virus began to affect computers. Worldwide catastrophe did not follow.

April 6, 1992 - Microsoft released Windows 3.1. It sold for $149 and added support for sound cards, MIDI, and CD Audio, Super VGA (800 x 600) monitors, and support for 9600 bps modems.

May 5, 1992 - Id Software released Wolfenstein 3-D. It wasn't the original first person shooter, but it launched the form into widespread popularity.

May 14, 1992 - Texas Instruments decided to take on the dominance of Intel, announcing its own 486 microprocessor chip. Cyrix corp. designed the chip for TI, but it proved unsuccessful in weakening Intel's dominance.

May 29, 1992 - John Sculley introduced the Apple Newton at CES. The first one unveiled on stage had dead batteries and didn't work.

July 18, 1992 - Silvano de Gennaro, an IT developer at CERN took a picture of the singing group 'Les Horribles Cernettes' who sang mostly about physics. Tim Berners-Lee would later use that picture as a test, making it the first photo uploaded to the World Wide Web.

October 26, 1992 - Software deployment issues in CAD, the new ambulance dispatch system in London caused 30-45 deaths. Poor training, a memory leak and no load testing contributed to the failure.

November 3, 1992 - Tim Berners-Lee posted a page describing the World Wide Web. It's the oldest page still served on the Web.

1993

March 22, 1993 – The Intel Corporation shipped the first Pentium chips featuring 60 and 66 MHz CPUs.

March 31, 1993 - Richard Depew accidentally posted 200 identical messages to news.admin.policy while testing some auto-moderation software. It became the first USENET postings to be referred to as spam.

April 22, 1993 - NCSA Mosaic 1.0 was released, becoming the first web browser to achieve popularity among the general public.

April 30, 1993 – CERN released a statement declaring the software protocols developed for the World Wide Web would be available in the public domain.

June 24, 1993 - "Severe Tire Damage," conducted the first known Internet concert. The band set their gear up on the patios of the Xerox Palo Alto Research Center and sent their show out on the Internet Multicast Backbone, or Mbone.

July 27, 1993 - Microsoft released Windows NT 3.1, completing its attempt to build an advanced 32-bit operating system from scratch.

August 16, 1993 - Ian Murdock announced the Debian Linux distribution system. The name combined his then girlfriend Debra's name with his, Deb-Ian. And now you know how to properly pronounce it.

August 21, 1993 - NASA lost contact with the Mars Observer three days before it was supposed to enter orbit. As it began to pressurize fuel tanks, the spacecraft's transmitters went silent and it was never heard from again.

August 23, 1993 - Nintendo agreed to use Silicon Graphics Inc. technology in a video game player it was developing.

September 3, 1993 - Infogear filed an application for a US trademark on "I PHONE" for its "communications terminals. The company would later register "IPhone" as well. Cisco acquired Infogear in 2000 and later worked out a deal with Apple to share the name.

September 24, 1993 - Broderbund Software released the game Myst, for the Macintosh computer. It became a record-setting bestseller and helped popularize CD-ROM drives.

December 2, 1993 – NASA launched the Space Shuttle Endeavour on a mission to repair the Hubble Space Telescope, turning the Hubble from a late night talk show joke to the source of some of the most beautiful and valuable astronomy yet done.

December 8, 1993 - The US Secretary of Defense declared the GPS system a dual use system that had Initial Operation Capability and opened the Standard Positioning System to civilians, which gave accuracy of 9 meters horizontally.

1994

March 7, 1994 – The Supreme Court found that 2 Live Crew's parody of Roy Orbison's "Oh Pretty Woman" was fair use, and not a violation of copyright, thus ensuring the future of The Onion.

March 14, 1994 – Linus Torvalds posted to comp.os.linux.announce that Linux kernel release 1.0. had arrived.

April 4, 1994 - Marc Andreessen and Jim Clark found Mosaic Communications Corp, which they later renamed Netscape Communications Corp. Andreesen developed the Mosaic browser while at the National Center for Supercomputing Applications (NCSA) at the University of Illinois.

April 12, 1994 - Immigration Lawyers Laurence Canter and Martha Siegel intentionally posted to more than 6,000 Usenet discussion groups about their green card services. It is considered the first occurrence of commercial spam.

May 23, 1994 - Sun Microsystems Inc. announced the programming language Java and the accompanying Web browser HotJava at the SunWorld '95 convention.

May 25, 1994 - CERN hosted the first international World Wide Web conference, which continued through May 27.

August 15, 1994 - Microsoft programmer Benjamin Slivka sent an email to his team suggesting they make a Web browser for Windows 95.

August 31, 1994 - Stockholders approved the merger of Aldus Corp. and Adobe Systems Inc. It united the two driving forces behind desktop publishing software. Aldus Pagemaker became Adobe Pagemaker.

September 1, 1994 - The United States Library of Congress held the first of several meetings to plan the conversion of its materials to digital form to make them accessible by computer networks.

September 12, 1994 - Mosaic Communications introduced its first software, the Mosaic NetScape network navigator and the Mosaic Netsite server line.

September 29, 1994 - Programmers first demonstrated the HotJava prototype browser to executives at Sun Microsystems Inc. It was an attempt to port the Java language to the Web. It worked.

October 27, 1994 - HotWired (later to become Wired.com) launched bringing with it the first large quantity sales of banner ads. AT&T, Zima, MCI, Volvo, Club Med and 1-800-COLLECT all plunked down for the privilege.

November 5, 1994 - Ken McCarthy of the Internet Gazette along with Marc Andreessen of the brand new Netscape (still called Mosaic Communications Corp) and Mark Graham held the first conference to focus on the commercial potential of the World Wide Web.

November 7, 1994 - University of North Carolina student radio station WXYC began what is considered the world's first Internet radio broadcast. DJ Michael Shoffner set it up. The simulcast continues as of 2012.

December 3, 1994 - The Sony PlayStation game console went on sale in Japan

December 15, 1994 - Netscape shipped version 1.0 of the Netscape Navigator Web browser.

1995

February 9, 1995 - Dr. Bernard Harris became the first African-American to walk in space. Joining him, Michael Foale became the first British-born American to walk in space.

February 15, 1995 - The FBI arrested Kevin Mitnick on charges of wire fraud and breaking into the computer systems of several major corporations.

February 22, 1995 - Chicago stockbroker Steve Fossett completed the first hot air balloon flight over Pacific Ocean. At 9600 km it was also the longest balloon flight.

February 22, 1995 – President Clinton signed an Executive Order directing the declassification of intelligence imagery acquired by the CORONA, ARGON and LANYARD US photo-reconnaissance satellites. More than 860,000 images of the Earth's surface, collected between 1960 and 1972 were made public.

March 1, 1995 - A little over a year after starting the website in January 1994, Jerry Yang and David Filo incorporated Yahoo!

March 25, 1995 - Ward Cunningham installed the First Wiki, WikiWikiWeb on a $300 computer someone gave him. He connected it to the Internet, using a 14.4-baud dial-up modem.

April 27, 1995 - The Justice Department sued to block Microsoft's purchase of Intuit, claiming the acquisition would raise prices and squash innovation. Intuit still exists but Microsoft Money is long gone.

May 4, 1995 - German electronics company Escom AG bought the rights to the name, patents and intellectual property of Commodore Electronics Ltd. for $10 million. Commodore had gone bankrupt the year before.

May 8, 1995 - The New York Times announced it would join eight other newspapers in the New Century Network. The network aimed to connect local online news services into a national service on the Web.

May 26, 1995 - Bill Gates authored an internal memo entitled "The Internet Tidal Wave" calling the Internet the most important development since the IBM personal computer. Microsoft soon got to work on its own Web browser.

June 6, 1995 - The Los Angeles Times reported that Father Leonard Boyle was working to put the Vatican's library on the World Wide Web through a site funded by IBM.

June 27, 1995 - Spyglass Inc. went public, the year after it began distributing its Spyglass Mosaic Web browser. The Spyglass browser powered the first version of Internet Explorer and had code in IE all the way up to IE 7.

June 29, 1995 - The Space Shuttle Atlantis docked with the space station Mir, the first-ever docking of a Shuttle to a Space Station.

August 9, 1995 - Netscape Communications staged an IPO. Shares opened at $28 and shot up to $75 per share in one day, becoming one of the indicators of the beginning of the dot-com boom.

August 16, 1995 - The first version Microsoft's Web browser, Internet Explorer 1, debuted. It was based on Mosaic, which Microsoft had licensed from Spyglass Inc.

August 24, 1995 - Microsoft released Windows 95. During development it was referred to as Windows 4.0 or by the internal codename "Chicago."

September 19, 1995 - International Talk Like a Pirate Day was first celebrated by John Baur (Ol' Chumbucket) and Mark Summers (Cap'n Slappy), of Albany, Oregon. They had come up with the idea on June 6th while playing racquetball, but that was D-Day. They chose the 19th because it was Summers' ex-wife's birthday, and the only day he could reliably remember.

October 10, 1995 - The Media Laboratory at the Massachusetts Institute of Technology wrapped up "A Day in the Life of Cyberspace" an attempt to chronicle what people did online that day.

October 23, 1995 - A federal judge for the first time authorized a wiretap of a computer network, leading to hacking charges against a young Argentinean for breaking into sensitive US government networks.

November 22, 1995 - The first feature-length film created entirely using computer-generated imagery was released to theaters. Toy Story grossed more than $350 million worldwide, making executive producer Steve Jobs, very happy.

November 27, 1995 - Microsoft released Internet Explorer 2.0, touting its privacy and encryption, and stepping up the browser war with Netscape.

1996

February 8, 1996 - John Perry Barlow posted "A Declaration of the Independence of Cyberspace" written in Davos, Switzerland. He foresaw a "civilization of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before."

February 8, 1996 - The US Congress passed the Communications Decency Act, part of the Telecommunications Act of 1996. In part, it attempted to hold website operators responsible for anyone younger than 18 seeing porn on the Internet. That provision was later struck down by the Supreme Court, however Section 230 which provides safe harbor to service providers is still in force.

February 10, 1996 - Chess's international grandmaster Garry Kasparov began a six game match against IBM's Deep Blue. Deep Blue won the first game, the first time that a current world champion had ever been beaten by a computer opponent under regular tournament conditions.

February 17, 1996 - World chess champion Garry Kasparov defeated Deep Blue in game 6 winning the match 4-2. He would lose the next match.

February 29, 1996 - Microprose released Civilization II, a sequel to Sid Meier's Civilization, and the version that would launch the franchise to widespread popularity.

March 23, 1996 - The US space shuttle Atlantis docked with the Russian space station Mir for the third time, and for the first time dropped off a US astronaut. Shannon Lucid began her record-breaking stay on the space station.

April 14, 1996 - Jennifer Kaye Ringley hooked up a camera in her dorm room at Dickinson College and set it to upload a picture every three minutes as an experiment. The JenniCam would eventually reach 4 million hits per day at its peak.

May 30, 1996 - AT&T announced they finally had a system that would allow computers to make and receive videophone calls over standard telephone lines. It was not called Skype. It did not catch on.

July 4, 1996 - Sabeer Bhatia and Jack Smith launched a free web email service called HoTMaiL, a play on HTML. Microsoft bought it a year later, but still calls it Hotmail.

July 6, 1996 - AOL settled lawsuits in California that accused the company of misleading subscribers about monthly service charges.

July 23, 1996 - The first commercial HDTV signal was broadcast in North Carolina by WRAL channel 32 operating at 100 kilowatts with an antenna 1,750 feet above the ground. 200 members of the press watched the broadcast at WRAL.

July 26, 1996 - Microsoft releases Beta 2 of Internet Explorer 3.0, touting customization options like parental controls and the ability to handle shared applications and Web phone calls.

August 26, 1996 - Netscape Communications Corp. announced it had partnered with several other big companies to create a software company called Navio Corp. Navio was meant to create an operating system to compete with Windows.

September 1, 1996 - Apple released its Pippin game console in the US. The idea was to provide an inexpensive game-focused computer. Apple licensed third parties like Bandai to make Pippin consoles.

September 27, 1996 - Kevin Mitnick was indicted on charges he broke into the systems of major software companies, and then transferred stolen material to computers at USC via the Internet. Seems prosaic today, but was unheard of at the time.

October 2, 1996 - US President Bill Clinton signed amendments to the Freedom of Information Act requiring the US government to make electronic documents available online.

November 7, 1996 - NASA launched the Mars global surveyor, humanities return to Mars after a 10-year absence. The mission discovered much about the Geology of the planet.

December 4, 1996 - General Motors began delivery of the EV1, an electric vehicle that would become well loved by its drivers then be taken back in 2002 and sent to car-crushers.

December 14, 1996 - John Tu and David Sun, the founders of Kingston Technology took $100 million from the sale of their privately held enterprise and gave it to employees — a spontaneous gesture to those who had helped make the memory-module company a market leader.

December 20, 1996 - Apple announced it would acquire NeXT Computer and bring co-founder Steve Jobs back to the company he left in 1985.

1997

February 11, 1997 - The Space Shuttle Discovery launched on Mission STS-82 with the objective of making significant upgrades to the scientific capabilities of the Hubble Space Telescope. The upgrades helped turn the Hubble from a punchline, to one of the greatest telescopes ever created.

April 1, 1997 - Dave Winer changed how he displayed 'Scripting News' so that it always showed the last ten days worth of posts. In other words the way every blog does it now. Whether this makes it the 'first blog' or not it was extremely influential and is definitely one of the oldest blogs out there, predating the term blog, of course.

May 3, 1997 - In New York City, Gary Kasparov began his re-match match against IBM's Deep Blue computer. He had won the previous match in February 1996 4-2.

May 11, 1997 - Deep Blue won its final match against Chess master Garry Kasparov, becoming the first computer to defeat a chess champion in match play.

June 11, 1997 - Philippe Kahn took the first cameraphone photograph of his newborn daughter and then wirelessly transmitted the photo to more than 2,000 people around the world. He had hacked together a digital camera and a phone. Kahn went on to form the company LightSurf.

June 12, 1997 - 3Com Corp. and US Robotics Corp. completed their merger. The two companies combined US Robotics modems with 3Com's interface cards.

June 17, 1997 - Programmers deciphered code written in the impenetrable Data Encryption Standard, the strongest legally exportable encryption software in the United States. The hackers organized over the Internet and cracked the software in five months, proving that stronger encryption was needed.

June 26, 1997 - The US Supreme Court struck down a portion of the Communications Decency Act as violating the first amendment protecting free speech.

July 17, 1997 - DNS was widely disrupted making email routing and web page delivery spotty throughout the day. An Ingres database failure resulted in corrupt .COM and .NET zone files. A system administrator mistakenly released the zone file without regenerating the file and verifying its integrity.

July 22, 1997 - Apple announced OS 8 for Macintosh computers. It added easier Internet integration and a 3D look to the OS.

July 28, 1997 - Dell announced its entry into the workstation market with the Dell Workstation 400.

August 6, 1997 - At MacWorld in Boston, Microsoft announced it would invest $150 million in Apple, and continue to make Microsoft Office for Mac for at least five years. The two companies also ended their lawsuit.

August 31, 1997 - The developer release of Apple's new OS, code name Grail1Z4 / Titan1U was released. It was known formally as Rhapsody and would evolve into OS X..

September 2, 1997 - IBM announced that its RS/6000 SP model parallel supercomputer, was now 58 percent faster than Deep Blue, the computer that beat Kasparov at chess.

September 6, 1997 - The US Navy in San Francisco commissioned the USS Grace Murray Hopper, a guided missile destroyer named after the computer pioneer.

September 16, 1997 - After purchasing NeXT the previous December, bringing Steve Jobs back to the company, the Apple Board named Jobs as interim CEO, replacing Gil Amelio.

September 24, 1997 - Ultima Online launched, revolutionizing online gaming by supporting thousands of simultaneous players in a persistent shared world.

December 17, 1997 - John Barger coined the term 'weblog' to describe his list of links on his site Robot Wisdom. Peter Merholz would later shorten it to just 'blog'.

December 18, 1997 - HTML 4.0 was recommended and published by the World Wide Web Consortium, the W3C. It offered the strict, transitional and frameset variations, and deprecated many of Netscape's visual tags in favor of CSS.

1998

February 4, 1998 - Noël Godin, a Belgian who made a practice of pie-ing rich and famous people struck a pie against the face of Bill Gates. Gates did not press charges.

March 31, 1998 - After three years of development and much wrangling with the Warcraft engine it was originally built on, Blizzard released the iconic game Starcraft.

April 5, 1998 - Long before texting or cell phones while driving were considered a danger, a driver in Marseilles, France was distracted by her Tamagotchi virtual pet. She ran into a group of cyclists killing one and injuring one other.

April 27, 1998 - Roughly 8,000 AOL subscribers joined the first known live interspecies chat with Koko the gorilla. Koko signed her answers; Penny Patterson interpreted them; and an AOL chat facilitator entered them in the computer.

May 18, 1998 - The United States Department of Justice and twenty US states filed civil actions against Microsoft, alleging the company abused monopoly power regarding operating system and Web browser sales.

June 11, 1998 – Compaq Computer paid $9.1 billion to acquire what remained of Digital Equipment Corporation, the company that had brought the world PDP and VAX.

June 25, 1998 - Microsoft released Windows 98 with less hype than Windows 95, but more consumer focus. Windows 98 was the last version of Windows that was based on DOS.

July 3, 1998 - Danielle Bunten Berry died of lung cancer. She was a pioneering game designer most famous for creating the multiplayer game M.U.L.E. in 1983.

September 4, 1998 – Larry Page and Sergey Brin filed for incorporation of Google, allowing them to cash a $100,000 check Andy Bechtolsheim, co-founder of Sun, had written to Google Inc.

September 11, 1998 - The US Congress released the contents of the Starr report on the internet. The report led to the impeachment but not the removal of President Clinton. The websites that hosted the report were slammed with traffic.

September 18, 1998 – The Internet Corporation for Assigned Names and Numbers aka ICANN was created in order to take over Internet administrative tasks from the US Government. The most famous of those tasks is overseeing the Domain Name System.

September 28, 1998 - Microsoft's Internet Explorer passed Netscape Navigator as the Web browser with the greatest market share, according to a report from the International Data Corporation.

October 24, 1998 - NASA Launched Deep Space 1, it's mission to seek out an asteroid, specifically, asteroid 9969 Braille. When that mission ended up being only partially successful, it went after Comet Borrelly where it got some choice information.

October 28, 1998 - A different Bill, President Bill Clinton signed into law the Digital Millenium Copyright Act, making it illegal for you to use computers the way they were designed to be used, if big companies didn't want you to.

October 29, 1998 - The Space Shuttle Discovery blasted off on STS-95 with 77-year old John Glenn on board, making him the oldest person to go into space.

November 20, 1998 - The first module of the International Space Station launched. Zarya, also called the Functional Cargo Block, provided electrical power, storage and propulsion. It's now consigned to being used for storage.

November 24, 1998 - AOL announced it would purchase Netscape Communications, merging what were then two of the biggest names on the Internet.

December 4, 1998 - The space shuttle Endeavour lifted off from Cape Canaveral, carrying the first American-built component of the International Space Station, a connecting node, known as Unity.

December 11, 1998 - The Mars Climate Orbiter was successfully launched on a Delta II rocket from Cape Canaveral Air Station in Florida. However, the probe disappeared on September 23rd before reaching Mars, apparently destroyed because scientists had failed to convert English measures to metric values.

1999

January 3, 1999 - The US Mars Polar Lander was launched. It would spend most of the year wending its way towards Mars before it lost communication with Earth in December, presumably after crashing.

February 5, 1999 - The first Victoria's Secret online fashion show became the first major webcast, attracting an estimated 1.5 million viewers worldwide. Proving even back then the Internet is for shopping.

March 16, 1999 Sony released Everquest the Massively multiplayer 3D world where you could play as a wizard, rogue or knight. It followed two years after Ultima Online.

March 16, 1999 - Mac OS X Server 1.0, the highly anticipated precursor of OS X desktop version (code name Hera) was released.

March 21,1999 – Dr. Bertrand Piccard, a Swiss psychiatrist, and Briton Brian Jones landed their Breitling Orbiter 3 just after 8 AM local time 300 miles southwest of Cairo, Egypt. They became the first people to circumnavigate the globe in a hot air balloon.

March 26, 1999 - The "Melissa" worm showed up in a file on the alt.sex usenet group and became the first successful mass-mailing worm. The worm's creator, David L. Smith, apparently named the worm after a lap dancer in Florida.

May 5, 1999 - Microsoft shipped Windows 98 SE to manufacturers. The new version included Internet Connection Sharing, Internet Explorer 5, Windows NetMeeting 3.

May 29, 1999 – Space Shuttle Discovery completed the first docking with the International Space Station.

June 1, 1999 - The Windows version of music-sharing program Napster was released.

June 22, 1999 - Nature Neuroscience published the first demonstration of live rats directly controlling a robot arm with their thoughts.

July 3, 1999 - At the Funspot Family Fun Center in Weirs Beach, New Hampshire, Billy Mitchell became the first ever to achieve a perfect score on Pac-Man.

In 1999 - The Sega Dreamcast debuted in North America. However many were distracted by the supposed 9/9/99 bug that ended up being just as much of a non-problem as the Y2K bug.

September 21, 1999 - Google came out of beta. The young company announced its new Google Scout feature and the launch of its new website, removing the beta designation from the Google search engine.

September 23, 1999 - NASA lost contact with the Mars Climate Orbiter. It began orbit normally, but after it went behind the planet and out of range, it never made contact again. It was later determined that the approach attitude was wrong because software put out imperial units instead of metric units.

November 30, 1999 - British Aerospace and Marconi Electronic Systems merged to form BAE Systems, Europe's largest defense contractor and the fourth largest aerospace firm in the world. Guglielmo Marconi had founded Marconi in 1897.

December 3, 1999 – NASA lost radio contact with the Mars Polar Lander moments before the spacecraft entered the Martian atmosphere.

December 7, 1999 - Six months after its birth, Napster is sued by the Recording Industry Association of America. The Industry refuses to settle, thus insuring that digital music sales will remain low for years to come.

December 24, 1999 - The very seasonal HTML 4.01 was published by the World Wide Web Consortium. HTML 4.01 remained the current HTML standard for well over a decade.

THE TWENTY-FIRST CENTURY

2000

February 17, 2000 - Microsoft released Windows 2000, the successor to Windows NT 4.0, and the final Windows release to display the "Windows NT" designation.

March 4, 2000 - The Sony PlayStation 2 game console went on sale in Japan.

March 10, 2000 -The NASDAQ hit 5,048.62, the highest point of the dot-com boom. The bust began the next day.

April 3, 2000 – US District Judge Thomas Penfield Jackson ruled violated the nation's antitrust laws by using its monopoly power in personal computer operating systems to stifle competition.

April 13, 2000 - Heavy metal band Metallica launched their lawsuit against Napster for enabling thievery and copyright infringement. It was the beginning of the end for Napster and all music piracy. Well, at least for Napster.

April 22, 2000 – The Big Number Change took place in the United Kingdom, changing how phone numbers were dialed in many areas. With the boom in mobile devices the UK had almost exhausted all possible numbers, and needed the change to increase the pool of numbers to be assigned.

May 2, 2000 – The United States government shut off Selective Access of the GPS system. That meant accurate positioning was no longer restricted to the US military. Positioning accuracy on the first day without Selective Access went from a 45-meter radius to a 6-meter radius.

May 3, 2000 - A "geocache" was hidden outside Beaver Creek, Oregon, kicking off the first "Great American GPS Stash Hunt" and the hobby now called geocaching.

May 4, 2000 - The "I Love You" virus spread to 55 million computers around the world, hijacking hard drives and deleting, renaming, or damaging files. The damage reached billions of dollars.

June 24, 2000 - President Clinton gave his weekly radio address live on the Internet for the first time.

July 28, 2000 - Ted Kekatos celebrated the first System Administrator Appreciation Day. He had been inspired by an HP ad showing people bringing gifts to their System Administrator. The day is celebrated annually on the last Friday of July.

August 17, 2000 - Nielsen/NetRatings announced that according to their data, more than half (52%) of United States households had Internet access for the first time. This backed up Media Metrix's report from April, which estimated that 51% of US households now had Internet access.

September 13, 2000 - The public beta of Apple's Mac OS X, code named Kodiak was released. Users had to pay $29.95 for the beta.

September 14, 2000 - Microsoft released Windows ME. The ME stood for Millennium Edition but deserving or not, would eventually become code for a bad or unnecessary OS update.

September 21, 2000 - Kevin Mitnick was released from a Lompoc, California prison after almost five years of incarceration.

October 31, 2000 - The Soyuz TM-31 launched, carrying Expedition 1 the first resident crew to the International Space Station, including Yuri Gidzenko, Sergei Krikalev and William Shepherd. The TM-31 was used as the crew's lifeboat while on the station.

October 31, 2000 - Bertelsmann Music Group (BMG) and Napster agreed to develop a service for swapping and sharing music. The service never materialized.

November 16, 2000 - ICANN announced its decision to include 7 new top-level domains giving birth to the .aero, .biz, .coop, .info, .museum, .name and .pro, TLDs.

2001

January 9, 2001 - Apple introduced iTunes for the Macintosh, featuring CD ripping, digital music organizing, and Internet radio.

January 11, 2001 - AOL and Time Warner completed their merger. At the time it was seen as a signal of the victory of the Internet over old media. Time Warner would eventually come out on top and spin AOL back out as separate company.

January 15, 2001 - Wikipedia, the free Wiki content encyclopedia, went online as a feeder project for Nupedia, an expert-written online encyclopedia.

January 28, 2001 - The Baltimore Ravens and the New York Giants faced off in Tampa Bay, Florida, for Super Bowl XXXV, and facial-recognition surveillance cameras pointed at tens of thousands of fans entering the game. It found 12 false positives.

February 12, 2001 – The NEAR Shoemaker spacecraft touched down on 433 Eros after transmitting 69 close up pictures. It became the first spacecraft to land on an asteroid.

February 13, 2001 - Microsoft gave the first public look at their new version of Windows, called Windows XP, formerly codenamed Whistler.

March 23, 2001 – The final commands to light the engines of the Progress supply ship were sent to the Russian Mir space station, which then broke up in the atmosphere before falling into the southern Pacific Ocean near Fiji.

March 24, 2001 - Apple released its new operating system Mac OS X, code named Cheetah, with a retail price of $130.

April 28, 2001 - Dennis Tito became the first "space tourist" in human history paying his own way to the International Space Station aboard a Russian Soyuz spacecraft.

July 2, 2001 - Bram Cohen first revealed BitTorrent on a Yahoo group called decentralization.

July 5, 2001 - Rob Flickenger and friends posted details of their now legendary 12db Pringles-can antenna to boost WiFi signal distance.

July 18, 2001 - Apple announced Mac OS X 10.1 Puma, the first update to OS X.

August 24, 2001 - WebKit received its first commit of code from Apple. The Safari browser appeared two years later and WebKit was open sourced in 2005.

September 2, 2001 - At ECTS in London, Blizzard announced an online RPG version of its popular Warcraft franchise, called "World of Warcraft".

September 14, 2001 - The Nintendo GameCube went on sale in Japan. It was the first Nintendo game console that did not use cartridges.

September 25, 2001 - Apple announced the release of Mac OS X 10.1 Puma, the first major upgrade to OS X.

October 12, 2001 - The end of an era as the Polaroid Corporation files for federal bankruptcy protection, killed off by 1-hour developing and the rise of digital cameras. Bank One bought most of the company and re-launched a company that went on to stop making cameras and film.

October 23, 2001 - Apple announced their new music player, the iPod. Apple used PortalPlayer's reference platform and hired Pixo to design and implement the user interface. The iPod became the first massively successful digital music player.

October 25, 2001 - Microsoft Windows XP hit retail shelves for the first time.

November 10, 2001 - The first Apple iPod went on sale. Analysts agreed that the price of $399 was too high, and Apple was too inexperienced in consumer electronics to make it a success.

November 15, 2001 - Microsoft entered the game console war with the first Xbox going on sale in North America. It pitted Microsoft against Sony's PS2 just three days before Nintendo's GameCube went on sale.

November 27, 2001 - Scientists announced they had used the Hubble telescope to detect and analyze the atmosphere on an extrasolar planet for the first time. The planet HD 209458 b, unofficially called Osiris was found to have sodium in its atmosphere.

December 3, 2001 - In Bryant Park in Manhattan, Inventor Dean Kamen unveiled the secret project with the codenamed "Ginger" that Steve Jobs reportedly said would cause cities to be re-architected. The Segway Personal Transporter has become iconic for mall cops and mailmen.

December 31, 2001 - Microsoft provided its last day of support for Windows 95 making it officially "obsolete" according to the Microsoft Lifecycle policy, after only 6 years.

2002

February 19, 2002 - Odyssey, the first of six straight operational Mars vehicles began its mission to map the planet.

May 6, 2002 - Apple's Steve Jobs previewed Mac OS X 10.2 Jaguar during his Worldwide Developers Conference keynote. It featured a handwriting technology dubbed Inkwell, an iChat instant messenger client, QuickTime 6 integration and more.

June 5, 2002 - Mozilla.org announced the release of Mozilla 1.0, an open-source browser built on the Gecko engine that also powered Netscape.

June 18, 2002 - Kevin Warwick had his chip removed. Warwick implanted the chip earlier that year in order to experiment with human-computer interaction, culminating in a direct connection to his wife.

July 17, 2002 - Apple announced PC versions of the iPod with MusicMatch software instead of iTunes. The company also announced a 20 GB version of the music player and touch-sensitive scroll wheel and dropped the prices.

July 21, 2002 - WorldCom filed for the largest Chapter 11 bankruptcy in US history. It was the number two long-distance phone company, at a time when that still meant something. It would end up changing its name back to MCI, and its remains exists as Verizon's business division.

September 23, 2002 – Mozilla Phoenix 0.1 was released. It was the first public version of the web browser without mail or web editor, which would become Mozilla Firefox.

December 16, 2002 - Creative Commons formally launched, unveiling Machine-Readable Copyright Licenses and a revamped website.

2003

January 23, 2003 - Earth lost communication with space probe Pioneer 10 which was 12 billion-kilometers from Earth.

April 10, 2003 - British Airways and Air France announced the retirement of all Concorde supersonic jets. After a quarter century of supersonic speeds, passengers in the 21st century would go slower than those who flew in the late 20th century.

April 25, 2003 – 50 years after Watson and Crick presented their findings on DNA in the publication Nature, the Human Genome Project concluded sequencing the genome and published a follow-on in Nature on their vision for genetic research.

April 28, 2003 - Apple opened the iTunes Music Store with 200,000 songs at 99 cents apiece. Songs could play back on any iPod and up to 3 authorized Macs. Windows users were out of luck but tracks could be burned to unlimited numbers of CDs.

April 28, 2003 - Apple unveiled the "third-generation" iPod. The new iPods were thinner and featured the still used bottom Dock Connector port rather than the top-mounted FireWire port. The iPod controls also became entirely touch sensitive.

June 2, 2003 – The European Space Agency launched the Mars Express probe from the Baikonur space center in Kazakhstan. It was the fastest planetary probe to be built.

June 10, 2003 – The Spirit Rover launched on a Delta II rocket, beginning NASA's Mars Exploration Rover mission.

June 19, 2003 - Apple released dock connector-to-USB 2.0 cables and drivers for third-generation iPods. Previous iPods had been FireWire only.

June 20, 2003 – The WikiMedia Foundation was founded in St. Petersburg, Florida by Jimmy Wales to oversee the various Wiki projects like Wikipedia.

July 15, 2003 - AOL Time Warner disbanded the Netscape browser development team. In conjunction, Mozilla created the Mozilla Foundation giving the project its first independent legal existence.

August 27, 2003 - Fairbanks, Alaska got the world's biggest UPS backup. The city hooked up the world's largest storage battery, built to provide an uninterrupted power supply of 40 megawatts.

October 1, 2003 - 4Chan launched its main page, intended as a sister-site to the Japanese 2Chan for discussions of manga and anime. They provided the fertile ground for the growth of lolcats, Rickrolling, Anonymous, Pedobear and more.

October 15, 2003 - China launched the Shenzhou 5, its first manned space mission, becoming the third country in the world to have independent human spaceflight capability. Yang Liwei piloted the capsule showing the flags of the People's Republic of China and the United Nations.

October 24, 2003 - The Concorde made its last commercial flight, a victim of air traffic reductions and rising maintenance costs. 100 passengers, including actress Joan Collins, model Christie Brinkley, made the flight from New York to London in it's usual three and a half hours. Flights have been slower ever since.

November 26, 2003 – The final flight of a Concorde ended when the supersonic jet touched down at Filton, Bristol, England, the airfield where it was built.

2004

January 2, 2004 - NASA's Stardust spacecraft successfully flew past Comet Wild 2, collecting samples it brought back to Earth 2 years later.

January 4, 2004 - One half of NASA's Mars Rover team, Spirit, landed on Mars to analyze the planet's rocks, looking for evidence of water. Its partner rover Opportunity was 21 days behind. Spirit is no longer active, but Opportunity keeps on chugging along.

January 6, 2004 - Apple debuted the iPod Mini, a diminutive 4GB version of the iPod available in five colors at $249.

January 21, 2004 - The Mars Rover Spirit abruptly stopped transmitting. Apparently too many files had been written to the flash memory and it went into fault mode.

February 4, 2004 - Mark Zuckerberg and a few other guys at Harvard launch TheFacebook so Harvard students can look up and hook up with each other. They would eventually expand the serve to the world.

February 20, 2004 - Apple's first iPod mini arrived in Apple retail stores and online. It was the first size variation of the iPod.

March 15, 2004 - Nicolas Jacobsen posted to a forum that he had hacked into T-Mobile's network and stolen information from major celebrities like Paris Hilton. Jacobsen was later charged with two counts of violating the US Computer Fraud and Abuse Act.

April 1, 2004 - In one of the best April Fools jokes ever, Google launched a real product. Weren't expecting that, were you Internet? Gmail launched in invite-only mode, making a Gmail account temporarily prestigious in the geek world.

May 4, 2004 - Apple announced that Steve Jobs would kick off that year's Worldwide Developers Conference by talking about Mac OS X 10.4 Tiger.

May 15, 2004 - Using a computer with a 2.4-GHz Pentium 4 processor, Josh Findley discovered the 41st Mersenne prime, 224,036,583 - 1. Mersenne primes have a close connection to perfect numbers, which are equal to the sum of their proper divisors.

June 21, 2004 - SpaceShipOne became the first privately developed piloted vehicle to leave Earth's atmosphere and reach the edge of space.

July 12, 2004 - Apple announced the iTunes Music Store sold its 100,000,000th downloaded song. "Somersault (Dangermouse remix)" by Zero 7 was purchased by Kevin Britten of Hays, Kansas.

July 19, 2004 - Apple announced the fourth-generation iPod with 12-hour battery life and the ability to shuffle songs. HP announced they would sell an HP branded version of this model of the iPod.

July 26, 2004 - Motorola announced that its next generation of cell phones would be iTunes-compatible. This first Apple phone, the Rokr, was not to meet with much success.

August 10, 2004 - The iTunes Music Store library passed the mark of 1,000,000 songs available.

August 13, 2004 - Adam Curry launched an RSS feed of audio recordings called "Daily Source Code" and podcasting became a thing.

September 8, 2004 – NASA's unmanned spacecraft Genesis crash-landed when its parachute failed to open.

October 4, 2004 - SpaceShipOne returned from its third journey, a reusable spacecraft that could carry passengers beyond the earth's atmosphere. It won the $10 million Ansari X prize for private spaceflight.

October 20, 2004 - Mark Shuttleworth sent out an email to Ubuntu developers announcing the first official release of the Linux-based operating system, Warty Warthog. Every six months since, a new version of Ubuntu comes out with a new alliterative animal-inspired name.

October 26, 2004 - Apple debuted the iPod photo, capable of displaying digital photographs and album art on a built-in color screen.

November 9, 2004 - The Mozilla Foundation released Firefox 1.0. It featured tabbed browsing and a popup blocker.

November 23, 2004 - Blizzard launched World of Warcraft, destined to become the largest MMORPG ever made.

2005

January 11, 2005 - Apple introduced the first iPod Shuffle, a music player with no screen and flash memory.

January 12, 2005 - Deep Impact launched from Cape Canaveral on a Delta 2 rocket, headed to an impact with a comet 9P/Tempel.

January 14, 2005 - The Huygens space probe landed on Titan, Saturn's largest moon. It was the first landing in the outer solar system, and the furthest from Earth.

January 15, 2005 - Thanks to a solar flare, ESA's SMART-1 lunar orbiter discovered calcium, aluminum, silicon and iron - in Mare Crisium on the moon.

February 15, 2005 - Chad Hurley and Steve Chen debut their new website, YouTube. It would quickly become the place to share videos, and quickly become hated by the movie and TV industry.

April 23, 2005 - At 8:27 PM, Jawed Karim, one of the co-founders of YouTube, uploaded the video "Me at the zoo" making it the first video ever to be uploaded to YouTube.

April 29, 2005 - Apple released Mac OS X 10.4 Tiger, introducing spotlight search and dashboard functionality.

August 18, 2005 – The largest and most widespread power outage in history happened on the Indonesian island of Java, affecting almost 100 million people.

October 12, 2005 - After previously assuring us nobody wanted to watch videos on an iPod, Steve Jobs reversed course and Apple started making videos available on iTunes. ABC/Disney was the only TV network available at the time but you could get episodes of Lost and Desperate Housewives the day after they aired.

October 27, 2005 - The European Space Agency launched its first satellite, a micro-satellite called the SSETI Express Satellite, designed and built by European students.

November 22, 2005 - Microsoft's Xbox 360 went on sale in North America. The follow-up to the Xbox would become a smash hit.

December 28, 2005 - The European Space Agency and the Galileo Joint launched GIOVE-A the first test-bed satellite for the Galileo geo-location system.

2006

January 27, 2006 – It was the end of an era. Western Union discontinued its Telegram and Commercial Messaging services. The company still handles money transfers.

March 1, 2006 - English-language Wikipedia reached its one-millionth article, "Jordanhill railway station."

March 21, 2006 - Jack Dorsey sent the first Twitter post, which read "just setting up my twttr". Twttr was the original spelling of the site, which was used internally at Odeo.com for the first 4 months.

May 19, 2006 - Apple opened its 20,000-square foot store at 767 Fifth Avenue. It was the second Apple store in New York City but the iconic glass cube made it the most famous.

May 31, 2006 - Swedish police raided The Pirate Bay website and shut it down. The site relaunched from servers outside Sweden.

July 15, 2006 - After a few months being used internally at Odeo, the Twttr service launched for public use. They later added some vowels and spun Twitter out as its own company.

November 11, 2006 - The Sony PS3 went on sale with a built-in Blu-ray player and hard drive.

November 30, 2006 - Microsoft released Windows Vista for business use. Vista improved on security over Windows XP, but took criticism for other features, and never rivaled Windows XP in adoption.

December 6, 2006 - NASA revealed photographs from the Martian Global Surveyor, of two craters called Terra Sirenum and Centauri Montes which appeared to show the evidence that water existed on the surface Mars, as recently as five years before.

2007

January 16, 2007 - Blizzard released the first expansion to its wildly successful World of Warcraft game. The Burning Crusade raised the level cap and allowed players flying mounts, at least when they were in Outland.

January 30, 2007 - Microsoft released Windows Vista for home use.

March 4, 2007 – Election Day was held in Estonia, and for the first time in the world, voters were allowed to vote on the Internet. Approximately 30,000 voters took advantage of electronic voting. Ballots had to be completed three days before Election Day.

June 29, 2007 - The first Apple iPhone went on sale.

August 4, 2007 - NASA's Phoenix spaceship launched on its mission to survey the Martian Arctic in search of water, geological discoveries, and evidence of conditions for biological life.

August 8, 2007 - Barbara Morgan became the first educator to safely reach space on the US Space Shuttle Endeavour.

August 22, 2007 - The Storm botnet sent out a record 57 million virus-infected emails. It failed to take down the Internet.

September 5, 2007 - Apple introduced the iPod Touch, bringing the multitouch first introduced on the iPhone, to its popular iPod line.

September 17, 2007 – AOL announced plans to refocus the company on advertising relocate its corporate headquarters from Dulles, Virginia to New York City.

October 31, 2007 - Nintendo of Japan finally ended support for the repair of FamiCom game consoles, the Japanese name for NES, citing a shortage of parts. It was the end of an 8-bit era.

November 5, 2007 - China's first lunar satellite, the Chang'e 1 went into orbit around the Moon. The spacecraft operated until March 2009.

November 14, 2007 - The last Direct Current electrical distribution system in the US was shut down by Con Edison in New York.

December 27, 2007 - Warner Music Group became the third major music label to begin selling DRM-free MP3s through Amazon.

2008

January 10, 2008 - Sony BMG became the last major label to agree to sell DRM-free MP3s.

June 8, 2008 - Apple announced Mac OS X 10.6 Snow Leopard.

July 1, 2008 - Bill Gates retired as an employee of Microsoft, to focus on the Bill and Melinda Gates foundation. He remained Chairman of the Board.

July 11, 2008 - Apple's second phone, the iPhone 3G went on sale, featuring 3G data connectivity.

September 10, 2008 – The Large Hadron Collider at CERN powered up in Geneva, Switzerland, on its quest to discover the secrets of particle physics, especially evidence for the Higgs Boson.

September 15, 2008 - Electronics retailer Best Buy acquired the Napster music service for $121 million, preventing the once dominating music-sharing service from going out of business.

September 23, 2008 - The T-Mobile G1 launched, the first phone to use Google's Android OS, as it began it's competition against the barely year-old iPhone.

September 28, 2008 – SpaceX launched the Falcon 1, first private spacecraft to enter orbit.

2009

January 20, 2009 - The inauguration of US President Barack Obama became the most widely streamed Presidential inauguration to that date. According to Akamai's Net Usage Index, web traffic peaked at 5.4 million requests per minute — and 2 terabits per second.

February 10, 2009 – One of Motorola's communication satellites Iridium 33 collided with defunct Russian satellite Kosmos-2251 destroying both. It was an unprecedented space collision.

In 2009 – NASA launched the Kepler space observatory, with a mission to discover Earth-like planets orbiting other stars.

June 18, 2009 – The Lunar Reconnaissance Orbiter (LRO), a NASA robotic spacecraft was launched on its mission to collect information about the Moon, particularly around the poles.

August 28, 2009 - Apple released Mac OS X 10.6 Snow Leopard featuring many minor improvements and integration with Microsoft Exchange.

October 9, 2009 - The first lunar impact of the Centaur and LCROSS spacecrafts kicked up some dust as part of NASA's Lunar precursor Robotic program. The impact has led to greater certainty that there is water on the moon.

October 22, 2009 - Microsoft released Windows 7. And there was much rejoicing.

2010

March 2, 2010 - The Federal Constitutional Court of Germany rejected legislation requiring electronic communications traffic data retention for a period of 6 months as a violation of the guarantee of the secrecy of correspondence.

May 21, 2010 – The Japan Aerospace Exploration Agency (JAXA), launched a solar-sail spacecraft IKAROS aboard an H-IIA rocket. The vessel would test out the performance of solar sails, and make a Venus flyby later in the year.

June 4, 2010 – Falcon 9 Flight 1 launched the maiden flight of the SpaceX Falcon 9 rocket, setting a new benchmark for non-governmental space flight. The rocket put a dummy payload into orbit as a test.

July 25, 2010 - Wikileaks published classified documents about the War in Afghanistan, one of the largest leaks in US military history.

December 8, 2010 - With the second launch of the SpaceX Dragon, SpaceX became the first privately held company to successfully launch, orbit and recover a spacecraft.

2011

February 3, 2011 - The Number Resource Organization announced that the free pool of available IPv4 addresses was fully depleted. The IANA allocated the last of the blocks equally between the five Regional Internet Registries.

February 14, 2011 - IBM's Watson, an AI computer system competed against Jeopardy champions Ken Jennings and Brad Rutter. Watson cleaned up, winning $77,147 to Mr. Jennings's $24,000 and Mr. Rutter's $21,600.

February 24, 2011 - The Space Shuttle Discovery lifted off from Cape Canaveral on STS-133, its final mission.

March 9, 2011 – The Space Shuttle Discovery made its final landing after 39 flights.

March 11, 2011 - Apple began selling the iPad 2, a thinner version of the first iPad that also included a camera.

May 10, 2011 - Google announced its Open Hardware Platform and the Google Music service, which would eventually become Google Play Music.

July 8, 2011 - The Space Shuttle Atlantis launched on the final Space Shuttle mission.

July 21, 2011 - The Space Shuttle Atlantis landed at Kennedy's Shuttle Landing Facility Runway 15, ending the US space shuttle missions.

September 22, 2011 - Facebook announced its new Timeline feature, which would collect all your posts and materials in chronological order, replacing the old profile.

September 28, 2011 - Amazon shook up the tablet market, announcing the Amazon Kindle Fire 7-inch tablet for $199.

October 5, 2011 - Steve Jobs died at his home surrounded by family. The co-founder and CEO of Apple had fought pancreatic cancer for years.

2012

January 18, 2012 - Many websites, led by Reddit, Wikipedia and others, conducted an Internet "blackout" to protest the US SOPA/PIPA bills.

March 7, 2012 - Apple announced the 3rd generation iPad with a retina display and a new Apple TV

June 27, 2012 - Sergey Brin interrupted a Google announcement of the new Google + app to show off the Project Glass smart glasses by having sky divers wearing the prototypes, jump out of a zeppelin and land on the Moscone Convention Center in downtown San Francisco, while streaming video in a Google hangout.

August 5, 2012 - The Mars Science Laboratory, known as the Curiosity Rover successfully landed on the surface of Mars in one of the most complicated automated landings ever, involving a sky crane.

August 23, 2012 - Microsoft unveiled a new logo for the first time in 25 years, opting for simple squares of color and block type with an overlapping 'f' and 't'.

September 20, 2012 - Makerbot Industries released the Replicator 2 3D printer, meant for non-expert users, and providing 100 micron resolution printing. They also announced the opening of a store in Manhattan.

October 7, 2012 - SpaceX launched the first private resupply mission to the International Space Station.

October 26, 2012 - Microsoft's Windows 8 operating system went on sale, with its tile-based start screen.

Epilogue

Full citations for all these entries can be found on the Web at
http://www.tommerritt.com/about/tech-history-citations/

But a few sources proved invaluable and I want to call them out
specifically.

Wired.com does a daily post about science and tech history that's
outstanding. Today in Science History at todayinsci.com was an excellent
source of ideas for the non-computer oriented entries, especially pre-20th
century. The Computer History Museum site, computerhistory.org has an
excellent calendar covering the rise of the big machines of the mid-late
20th century in particular. The Great Geek Manual, was another good
jumping off point for ideas, as was Wikipedia.

With all these sites, I attempted to find independent confirmation of the
facts of the entries, especially the dates. I opted for primary sources when
I could, but reputable secondary sources were often necessary. Academic
institutions, journals, and publications dedicated to history fall into my
rough definition of reputable. On occasion I have cited Wired and the
Computer History Museum directly, when I felt the facts were widely
confirmed but could only confirm the date at those sites.

I mostly tried to follow the same citation guidelines as Wikipedia uses,
which means I did not cite Wikipedia except in a couple cases where
Wikipedia was the primary source, such as the first Wikipedia post, and of
course, Jimmy Wales birthday.

I tried very hard to get these dates and facts right. I'm sure there are
mistakes. There always are. But compared to the vast number of "this day
in history" sites that are out there with horribly inaccurate unsubstantiated
entries, I think I did OK.

If you have a correction or clarification AND CAN CITE a reliable
source for it, send the info to tommerritt@tommerritt.com and if I can
verify it, and use it, I'll give you credit in forthcoming editions.

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